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(21) International Application Number: PCT/US98/06955 (22) International Filing Date: 10 April 1998 (10.04.98) (30) Priority Data: 08/838,821 10 April 1997 (10.04.97) US (71) Applicant: GENETICS INSTITUTE, INC. [US/US]; 87 CambridgePark Drive, Cambridge, MA 02140 (US). (72) Inventors: JACOBS, Kenneth; 151 Beaumont Avenue, Newton, MA 02160 (US). MCCOY, John, M.; 56 Howard Street, Reading, MA 01867 (US). LAVALLIE, Edward, R.; 113 Ann Lee Road, Harvard, MA 01451 (US). RACIE, Lisa, A.; 124 School Street, Acton, MA 01720 (US). MERBERG, David; 2 Orchard Drive, Acton, MA 01720 (US). TREACY, Maurice; 93 Walcott Road, Chestnut Hill, MA 02167 (US). SPAULDING, Vikki; 11 Meadowbank Road, Billerica, MA 01821 (US). AGOSTINO, Michael, J.; 26 Wolcott Avenue, Andover, MA 01810 (US). (74) Agent: SPRUNGER, Suzanne, A.; Genetics Institute, Inc., 87 CambridgePark Drive, Cambridge, MA 02140 (US).	(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>	
(54) Title: SECRETED EXPRESSED SEQUENCE TAGS (sESTs) (57) Abstract Secreted expressed sequence tags (sESTs) isolated from a variety of human tissue sources are provided.		

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SECRETED EXPRESSED SEQUENCE TAGS (sESTs)

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FIELD OF THE INVENTION

The present invention provides novel polynucleotides which are expressed sequence tags (ESTs) for secreted proteins.

BACKGROUND OF THE INVENTION

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Gargantuan efforts have been employed by various investigational projects to randomly sequence portions of naturally-occurring cDNAs. The rationale behind this approach to identification and sequencing genes is founded in two basic principles: (1) that transcribed cDNAs represent the product of the most important genes, namely those that are actually expressed *in vivo*, and (2) that efforts to sequence genes and other portions of the genome of target organisms which are not actually expressed wastes substantial effort on areas not likely to yield genetic information of therapeutic importance. Thus, the high-throughput sequencing efforts focus on only those portions of the genome which are expressed. The randomly produced cDNA sequences represent "expressed sequence tags" or "ESTs", which identify and can be used as probes for the longer, full-length cDNA or genomic sequence from which they were transcribed.

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Although this "shortcut" approach to genomic sequencing presents savings of effort compared to sequencing of the complete genome, it still produced a vast array of ESTs which may not be directly useful as protein therapeutics. To date, the majority of protein-related drug discovery has focused on the use of secreted proteins to produce a desired therapeutic effect. Since the EST approach theoretically identifies all expressed proteins, it produces an EST library which contains a mixture of secreted proteins (such as hormones, cytokines and receptors) and non-secreted proteins (such as, for example, metabolic enzymes and cellular structural proteins), without identifying which ESTs correspond to proteins falling into either category. As a result, these methods are not optimally tailored to the needs of investigators searching for secreted proteins because they must separate the secreted "wheat" from the non-secreted "chaff", wasting effort and resources in the process.

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Co-assigned U.S. Patent No. 5,536,637, which is incorporated herein by reference, provides methods for focusing genomic sequencing efforts on sequences encoding the secreted proteins which are of most interest for identification of protein therapeutics. The '637 patent discloses a "signal sequence trap" which selectively identifies ESTs for secreted

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proteins, namely "secreted expressed sequence tags" or "sESTs". It is to these sESTs that the present invention is directed.

SUMMARY OF THE INVENTION

5 The present invention provides for sESTs isolated from a variety of human RNA/cDNA sources.

In preferred embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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or a complement of said sequence.

15 In other embodiments, the present invention provides an isolated polynucleotide
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or a complement of said sequence.

In further embodiments, the present invention provides an isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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30 or a complement of said sequence.

In yet other embodiments, the present invention provides an isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

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NO:1429, SEQ ID NO:1430, SEQ ID NO:1431, SEQ ID NO:1432, SEQ ID
NO:1433, SEQ ID NO:1434, SEQ ID NO:1435, SEQ ID NO:1436, SEQ ID
NO:1437, SEQ ID NO:1438, SEQ ID NO:1439, SEQ ID NO:1440, SEQ ID
25 NO:1441, SEQ ID NO:1442, SEQ ID NO:1443, SEQ ID NO:1444, SEQ ID
NO:1445, SEQ ID NO:1446, SEQ ID NO:1447, SEQ ID NO:1448, SEQ ID
NO:1449, SEQ ID NO:1450, SEQ ID NO:1451, SEQ ID NO:1452, SEQ ID
NO:1453, SEQ ID NO:1454, SEQ ID NO:1455, SEQ ID NO:1456, SEQ ID
NO:1457, SEQ ID NO:1458, SEQ ID NO:1459, SEQ ID NO:1460, SEQ ID
30 NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID
NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID
NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID
NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID
NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID

NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID
 NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID
 NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID
 NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID
 NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or to a complement of said sequence.

The invention also provides for proteins encoded by the above-described polynucleotides.

DETAILED DESCRIPTION

The nucleotide sequences of the sESTs of the present invention are reported in the Sequence Listing below. Table 2 lists the "Clone ID Nos." assigned by applicants to each SEQ ID NO: in the Sequence Listing.

Table 2

Each pair of entries in this table consists of the SEQ ID NO (e.g., 1, 2, etc.) followed by the Clone ID No. for such sequence (e.g., B11, B18, etc.).

1	BV31	18	CB302	35	BZ83	52	CD244
2	BV34	19	CB318	36	BZ87	53	CD265
3	BV37	20	CB321	37	CB15	54	BT217
4	BV45	21	CB96	38	CB2	55	BV278
5	BV8	22	CB98	39	CB44	56	BV280
6	BV93	23	BZ42	40	CC11	57	BV282
7	BV99	24	BZ53	41	CC182	58	BV285
8	CB100	25	BZ56	42	CC298	59	BV286
9	CB107	26	BZ6	43	CC310	60	BV291
10	CB110	27	BZ607	44	CC323	61	BV295
11	CB114	28	BZ61	45	CC332	62	BW389
12	CB118	29	BZ62	46	CC335	63	BX135
13	CB123	30	BZ641	47	CC338	64	BX141
14	CB129	31	BZ644	48	CC41	65	BX148
15	CB137	32	BZ72	49	CC52	66	BZ1
16	CB239	33	BZ74	50	CD107	67	BZ16
17	CB259	34	BZ82	51	CD205	68	BZ187

	69	BZ19	103	CE159	137	CH315	171	CC194
	70	BZ205	104	CE2	138	CH325	172	CC198
	71	BZ222	105	CE347	139	BZ568	173	CC199
	72	BZ230	106	CE36	140	BZ578	174	CC205
5	73	BZ234	107	CE40	141	BZ588	175	CC215
	74	BZ244	108	CE87	142	BZ597	176	CC253
	75	BZ269	109	CG1	143	BZ598	177	CC258
	76	BZ280	110	CG44	144	CH637	178	CC259
	77	BZ288	111	CG60	145	CH644	179	CC265
10	78	BZ304	112	CG68	146	CH699	180	CC288
	79	BZ328	113	BP202	147	CI240	181	CC95
	80	BZ331	114	BP242	148	CI247	182	CC96
	81	BP646	115	BP243	149	CJ1	183	CD311
	82	BP652	116	BZ444	150	CJ19	184	CD323
15	83	BP656	117	BZ453	151	CJ24	185	CH338
	84	BP666	118	CC233	152	CJ27	186	CH355
	85	BP667	119	CC242	153	CJ3	187	CH377
	86	BP674	120	CC247	154	CJ37	188	CH421
	87	BP695	121	CC344	155	CJ42	189	CH425
20	88	BP705	122	CC346	156	CJ44	190	CH522
	89	BP713	123	CC351	157	CJ49	191	CH541
	90	BP720	124	CC359	158	CJ50	192	CH555
	91	BP750	125	CC364	159	CJ55	193	CH558
	92	BP754	126	CC365	160	CJ6	194	CH582
25	93	BW143	127	CC374	161	CJ76	195	CH595
	94	BR307	128	CE303	162	CJ77	196	CH720
	95	BR309	129	CE328	163	CJ84	197	CH723
	96	BR312	130	CG199	164	CJ86	198	CH724
	97	BR318	131	CG209	165	CJ91	199	CH735
30	98	CB187	132	CG210	166	CC111	200	CH742
	99	CB190	133	CG350	167	CC118	201	CI126
	100	CB204	134	CG354	168	CC120	202	CI129
	101	CB213	135	CG426	169	CC126	203	CI133
	102	CE120	136	CH303	170	CC130	204	CI181

	205	CI229	239	CG160	273	CI395	307	CJ397
	206	CI25	240	CG175	274	CI407	308	CJ400
	207	CI52	241	CG176	275	CI411	309	CJ404
	208	CI84	242	CG180	276	CI437	310	CJ415
5	209	CI91	243	CG279	277	CI443	311	CJ420
	210	BP163	244	CG292	278	CI444	312	CJ424
	211	BP175	245	CG300	279	CI459	313	CJ434
	212	BP199	246	CG301	280	CI480	314	CJ454
	213	BP272	247	CG314	281	CI490	315	CJ457
10	214	BP284	248	CG315	282	CI492	316	CJ481
	215	BP294	249	CG324	283	CI493	317	CJ493
	216	BP299	250	CG336	284	CI510	318	CJ501
	217	BP300	251	CG99	285	CI522	319	CJ514
	218	BP306	252	CH143	286	CI534	320	CJ539
15	219	BP311	253	CH207	287	CI542	321	CJ540
	220	BP312	254	CH224	288	CI560	322	CJ549
	221	BP327	255	CH227	289	CI561	323	CJ551
	222	BP345	256	CH245	290	CI583	324	CK126
	223	BP368	257	CH246	291	CI586	325	CK151
20	224	BP467	258	CH27	292	CJ145	326	CK181
	225	BP468	259	CH30	293	CJ149	327	CK201
	226	BR375	260	CH4	294	CJ160	328	CK213
	227	BR390	261	CH64	295	CJ164	329	CK218
	228	BR408	262	CH78	296	CJ168	330	CK234
25	229	BR418	263	CH85	297	CJ176	331	CK37
	230	BY66	264	CH87	298	CJ183	332	CK48
	231	CF118	265	CN320	299	CJ194	333	CL104
	232	CF127	266	CN343	300	CJ206	334	CL110
	233	CF22	267	CN344	301	CJ230	335	CL122
30	234	CF235	268	CN395	302	CJ237	336	CL132
	235	CG109	269	CN423	303	CJ257	337	CL147
	236	CG131	270	CI363	304	CJ265	338	CL152
	237	CG153	271	CI386	305	CJ378	339	CL181
	238	CG158	272	CI392	306	CJ389	340	CL182

	341	CL399	375	CN516	409	CO58	443	CO155
	342	CL469	376	CN532	410	CO48	444	CO153
	343	CL470	377	CN552	411	CO444	445	CO145
	344	CL481	378	CN593	412	CO431	446	CO140
5	345	CL493	379	CN619	413	CO391	447	CO139
	346	CM12	380	CN621	414	CO384	448	CO128
	347	CM178	381	CN667	415	CO36	449	CO1254
	348	CM188	382	CN703	416	CO351	450	CO1247
	349	CM194	383	CN718	417	CO337	451	CO1232
10	350	CM246	384	CN729	418	CO327	452	CO1224
	351	CM251	385	CN835	419	CO315	453	CO1223
	352	CM54	386	CN896	420	CO304	454	CO1206
	353	CM62	387	CO933	421	CO270	455	CO1198
	354	CN140	388	CO924	422	CO268	456	CO1196
15	355	CN171	389	CO908	423	CO264	457	CO1194
	356	CN173	390	CO900	424	CO261	458	CO1187
	357	CN238	391	CO889	425	CO257	459	CO1180
	358	CN29	392	CO888	426	CO253	460	CO1178
	359	CN291	393	CO874	427	CO25	461	CO1175
20	360	CN304	394	CO851	428	CO246	462	CO117
	361	CN327	395	CO83	429	CO244	463	CO1168
	362	CN49	396	CO821	430	CO240	464	CO1164
	363	CN50	397	CO806	431	CO228	465	CO1162
	364	CN54	398	CO798	432	CO223	466	CO1161
25	365	CN65	399	CO79	433	CO222	467	CO1159
	366	CJ305	400	CO71	434	CO209	468	CO1153
	367	CJ316	401	CO7	435	CO205	469	CO1151
	368	CJ317	402	CO69	436	CO204	470	CO1137
	369	CJ336	403	CO66	437	CO20	471	CO1123
30	370	CJ347	404	CO639	438	CO197	472	CO1076
	371	CJ360	405	CO638	439	CO185	473	CO1072
	372	CJ365	406	CO625	440	CO170	474	CO1026
	373	CJ366	407	CO62	441	CO17	475	CO1000
	374	CN483	408	CO602	442	CO163	476	CN755

	477	CN736	511	CR1166	545	CR632	579	CO409
	478	CN709	512	CR1186	546	CR641	580	CO474
	479	CO975	513	CR1190	547	CT729	581	CO480
	480	CO990	514	CR329	548	CN922	582	CO500
5	481	CP280	515	CR354	549	CN934	583	CO519
	482	CP283	516	CR377	550	CN951	584	CO522
	483	CP287	517	CR390	551	CN952	585	CO526
	484	CP289	518	CR392	552	CN980	586	CO559
	485	CP294	519	CR422	553	CP111	587	CO595
10	486	CP304	520	CR423	554	CP147	588	CO605
	487	CP307	521	CR466	555	CU13	589	CO618
	488	CP311	522	CR477	556	CP251	590	CO629
	489	CP313	523	CR478	557	CP258	591	CO643
	490	CP314	524	CR482	558	CP33	592	CO653
15	491	CP328	525	CR491	559	CP41	593	CO661
	492	CP352	526	CR494	560	CP91	594	CO667
	493	CQ286	527	CR502	561	CP92	595	CO695
	494	CQ294	528	CR506	562	CQ160	596	CO696
	495	CQ304	529	CR513	563	CQ165	597	CO707
20	496	CQ309	530	CR514	564	CQ268	598	CO716
	497	CQ331	531	CR515	565	CQ30	599	CO718
	498	CQ333	532	CR527	566	CR100	600	CO720
	499	CR1116	533	CR529	567	CR178	601	CO722
	500	CR1118	534	CR537	568	CR184	602	CO736
25	501	CR1121	535	CR538	569	CR263	603	CO763
	502	CR1127	536	CR540	570	CR335	604	CO767
	503	CR1135	537	CR541	571	CR4	605	CP116
	504	CR1141	538	CR545	572	CR61	606	CP151
	505	CR1142	539	CR587	573	CR93	607	CI293
30	506	CR1144	540	CR588	574	CO282	608	CI294
	507	CR1147	541	CR593	575	CO310	609	CI298
	508	CR1155	542	CR594	576	CO334	610	CU14
	509	CR1156	543	CR611	577	CO387	611	CU2
	510	CR1162	544	CR618	578	CO390	612	CU25

	613	CU32	647	CR678	681	CT748	715	CS520
	614	CU39	648	CR726	682	CT738	716	CS524
	615	CU40	649	CR733	683	CT726	717	CS534
	616	DA10	650	CR778	684	CT706	718	CT14
5	617	DA136	651	CR836	685	CT705	719	CT142
	618	DA155	652	CR839	686	CT702	720	CT143
	619	DA16	653	CR872	687	CT693	721	CT149
	620	DA165	654	CR890	688	CT677	722	CT156
	621	DA170	655	CR916	689	CT658	723	CT159
10	622	DA183	656	CR929	690	CT645	724	CT162
	623	DA223	657	CR930	691	CT636	725	CT188
	624	DA224	658	CR936	692	CT631	726	CT189
	625	DA225	659	CR974	693	CT616	727	CT190
	626	DA227	660	CT747	694	CT611	728	CT193
15	627	DA228	661	CT727	695	CT600	729	CT194
	628	DA234	662	CT690	696	CT585	730	CT2
	629	DA244	663	CT649	697	CT583	731	CT207
	630	DA246	664	CT624	698	CS224	732	CT220
	631	DA274	665	CT564	699	CS255	733	CT223
20	632	DA471	666	CT88	700	CS267	734	CT226
	633	DA490	667	CT864	701	CS271	735	CT227
	634	DA495	668	CT857	702	CS278	736	CT24
	635	DA496	669	CT852	703	CS284	737	CT254
	636	DA504	670	CT838	704	CS296	738	CT256
25	637	DA505	671	CT808	705	CS297	739	CT258
	638	DA507	672	CT807	706	CS317	740	CT271
	639	DA516	673	CT797	707	CS319	741	CT275
	640	DA529	674	CT791	708	CS322	742	CT28
	641	DA84	675	CT785	709	CS353	743	CT284
30	642	CR1003	676	CT783	710	CS366	744	CT293
	643	CR1013	677	CT780	711	CS471	745	CO1020
	644	CR1044	678	CT771	712	CS475	746	CO1043
	645	CR1056	679	CT754	713	CS485	747	CO1067
	646	CR1063	680	CT750	714	CS516	748	CO1069

	749	CO1080	783	DB257	817	CW1617	851	CT384
	750	CO1081	784	DB343	818	CW1632	852	CT392
	751	CO1094	785	DB415	819	CW1636	853	CT394
	752	CO956	786	DB53	820	CW1640	854	CT415
5	753	CO973	787	DB85	821	CW169	855	CT421
	754	CJ471	788	CW1000	822	CW172	856	CT423
	755	CJ472	789	CW1038	823	CW173	857	CT434
	756	CJ475	790	CW1087	824	CW175	858	CT440
	757	CJ483	791	CW1100	825	CV123	859	CT443
10	758	CJ484	792	CW1109	826	CV156	860	CT450
	759	CJ485	793	CW1112	827	CV160	861	CT453
	760	CJ486	794	CW115	828	CV192	862	CT457
	761	CJ488	795	CW1150	829	CV203	863	CT466
	762	CJ496	796	CW1155	830	CV215	864	CT474
15	763	CJ497	797	CW1177	831	CV227	865	CT475
	764	CJ498	798	CW1195	832	CV263	866	CT479
	765	CJ507	799	CW1200	833	CV275	867	CT489
	766	CJ508	800	CW1201	834	CV305	868	CT51
	767	CJ519	801	CW1214	835	CV328	869	CT519
20	768	CJ520	802	CW1225	836	CV380	870	CT521
	769	CJ521	803	CW1230	837	CV394	871	CT526
	770	CJ522	804	CW1233	838	CV410	872	CT536
	771	CJ534	805	CW1272	839	CV416	873	CT541
	772	CJ536	806	CW1292	840	CV461	874	CT547
25	773	CJ543	807	CW1306	841	CV493	875	CT550
	774	CJ544	808	CW1311	842	CV501	876	CT559
	775	CJ547	809	CW1314	843	CT3	877	CT562
	776	CK53	810	CW1334	844	CT314	878	DE36
	777	CK7	811	CW1365	845	CT317	879	DE37
30	778	CK70	812	CW1372	846	CT320	880	DE4
	779	CL49	813	CW149	847	CT326	881	DE42
	780	CL63	814	CW152	848	CT340	882	DE63
	781	DB203	815	CW1574	849	CT353	883	DE70
	782	DB208	816	CW1611	850	CT358	884	DE83

	885	DE103	919	CS771	953	CW775	987	DA337
	886	DE105	920	CS773	954	CW795	988	DA348
	887	DE110	921	CS776	955	CW802	989	DA373
	888	DE114	922	CW222	956	CW823	990	DA388
5	889	DE117	923	CW224	957	CW835	991	DA389
	890	DE119	924	CW226	958	CZ115	992	DA390
	891	DE91	925	CW232	959	CZ122	993	DA391
	892	DE95	926	CW254	960	CZ186	994	DA414
	893	DE96	927	CW272	961	CZ214	995	DA428
10	894	CW420	928	CW280	962	CZ247	996	DA443
	895	CW424	929	CW313	963	CZ251	997	DA451
	896	CW457	930	CW314	964	CZ268	998	CW1458
	897	CW485	931	CW347	965	CZ270	999	CW1475
	898	CS383	932	CW354	966	CZ278	1000	CW1481
15	899	CS384	933	CW363	967	CZ291	1001	CW1506
	900	CS399	934	CW374	968	CZ320	1002	CW1510
	901	CS405	935	CW382	969	CZ326	1003	CW1543
	902	CS409	936	CW383	970	CZ362	1004	CW1550
	903	CS431	937	CW386	971	CW1414	1005	CW1552
20	904	CS438	938	CW388	972	CW1440	1006	CZ372
	905	CS454	939	CW512	973	CE209	1007	CZ374
	906	CS588	940	CW517	974	CE216	1008	CW902
	907	CS629	941	CW53	975	CE232	1009	CW922
	908	CS636	942	CW554	976	CE242	1010	CW924
25	909	CS637	943	CW585	977	CF193	1011	CW976
	910	CS638	944	CW618	978	CH776	1012	CW979
	911	CS645	945	CE197	979	CW1381	1013	CW984
	912	CS679	946	CW662	980	CW1389	1014	CW998
	913	CS682	947	CW675	981	CW1399	1015	CZ1
30	914	CS734	948	CW691	982	CZ653	1016	CW753
	915	CS743	949	CW707	983	CZ681	1017	CW759
	916	CS752	950	CW735	984	CZ711	1018	CW800
	917	CS756	951	CW762	985	CZ719	1019	CW891
	918	CS765	952	CW768	986	DA306	1020	CW960

	1021	CT80	1055	DC14	1089	DH1206	1123	DF478
	1022	DF1115	1056	CW1670	1090	DH1212	1124	DF483
	1023	DF1117	1057	CW1682	1091	DH1213	1125	DF494
	1024	DF1125	1058	DF814	1092	DH190	1126	DF499
5	1025	DF134	1059	DF821	1093	DI191	1127	DF7
	1026	DF14	1060	DF842	1094	DI207	1128	DF706
	1027	DF163	1061	DG1	1095	DI216	1129	DF713
	1028	DF174	1062	DG17	1096	DI243	1130	DF727
	1029	DF175	1063	DG174	1097	DI248	1131	DF737
10	1030	DF180	1064	DG256	1098	DI261	1132	DF756
	1031	DF185	1065	DG26	1099	DF1005	1133	DF757
	1032	DF201	1066	DG266	1100	DF1009	1134	DF762
	1033	DF202	1067	DG326	1101	DF1010	1135	DF776
	1034	DF203	1068	DG327	1102	DF102	1136	DF777
15	1035	DF206	1069	DG329	1103	DF1050	1137	DF780
	1036	DF219	1070	DG330	1104	DF1062	1138	DF783
	1037	DF230	1071	DG331	1105	DF1063	1139	DG12
	1038	DF232	1072	DG44	1106	DF1084	1140	DG121
	1039	DF239	1073	DG65	1107	DF153	1141	DG128
20	1040	DF244	1074	DG69	1108	DF218	1142	DG141
	1041	DF259	1075	DG7	1109	DF251	1143	DG149
	1042	DF266	1076	DG71	1110	DF280	1144	DH28
	1043	DF46	1077	DG76	1111	DF286	1145	DH303
	1044	DF65	1078	DG82	1112	DF316	1146	DH318
25	1045	DF69	1079	DH1086	1113	DF317	1147	DH322
	1046	DB145	1080	DH1098	1114	DF343	1148	DH340
	1047	DB150	1081	DH1135	1115	DF347	1149	DH371
	1048	DB159	1082	DH1145	1116	DF370	1150	DH40
	1049	DB174	1083	DH1153	1117	DF382	1151	DH401
30	1050	DB180	1084	DH1182	1118	DF396	1152	DH432
	1051	CY1	1085	DH1185	1119	DF428	1153	DH451
	1052	CY11	1086	DH1190	1120	DF453	1154	DH496
	1053	CY3	1087	DH1191	1121	DF457	1155	DH502
	1054	CY9	1088	DH1201	1122	DF460	1156	DH529

	1157	DH66	1191	DF915	1225	DH1357	1259	DI501
	1158	DF518	1192	DF948	1226	DH145	1260	DI504
	1159	DF521	1193	DF950	1227	DH999	1261	DK111
	1160	DF538	1194	DF956	1228	DI160	1262	DK113
5	1161	DF543	1195	DF966	1229	DI386	1263	DK120
	1162	DF545	1196	DF968	1230	DI391	1264	DK122
	1163	DF547	1197	DF971	1231	DI435	1265	DK126
	1164	DF568	1198	DF973	1232	DI448	1266	DK134
	1165	DF587	1199	DF979	1233	DI454	1267	DK136
10	1166	DF589	1200	DF984	1234	DJ109	1268	DK150
	1167	DF591	1201	DF989	1235	DJ146	1269	DK160
	1168	DF601	1202	DH1257	1236	DJ167	1270	DK170
	1169	DF606	1203	DH1308	1237	DF1065	1271	DK182
	1170	DF62	1204	DH1314	1238	DI387	1272	DK185
15	1171	DF620	1205	DI341	1239	DI393	1273	DK197
	1172	DF625	1206	DH1265	1240	DI403	1274	DK206
	1173	DF648	1207	DI349	1241	DI430	1275	DK219
	1174	DF657	1208	DI355	1242	DI438	1276	DK223
	1175	DF659	1209	DI362	1243	DJ2	1277	DK227
20	1176	DF661	1210	DI366	1244	DJ188	1278	DK229
	1177	DF662	1211	DI508	1245	DJ238	1279	DK230
	1178	DF670	1212	DI516	1246	DJ259	1280	DK243
	1179	DF674	1213	DI518	1247	DK64	1281	DK264
	1180	DF682	1214	DF1066	1248	DK70	1282	DK268
25	1181	DF688	1215	DF1069	1249	DK81	1283	DK31
	1182	DF810	1216	DG279	1250	DK84	1284	DK39
	1183	DF823	1217	DH1010	1251	DI462	1285	DK93
	1184	DF835	1218	DH1013	1252	DI466	1286	DL101
	1185	DF860	1219	DH1044	1253	DI474	1287	DL110
30	1186	DF877	1220	DH1045	1254	DI475	1288	DL116
	1187	DF883	1221	DH1073	1255	DI479	1289	DL132
	1188	DF895	1222	DH1078	1256	DI480	1290	DL63
	1189	DF909	1223	DH1340	1257	DI482	1291	DL82
	1190	DF910	1224	DH1349	1258	DI500	1292	DL95

	1293	DL99	1327	DL491	1361	DL547	1395	DO181
	1294	DJ332	1328	DL495	1362	DL550	1396	DO419
	1295	DJ362	1329	DL498	1363	DL551	1397	DO424
	1296	DK290	1330	DL504	1364	DL601	1398	DO440
5	1297	DK321	1331	DM118	1365	DL604	1399	DO447
	1298	DK324	1332	DM122	1366	DL605	1400	DO568
	1299	DK329	1333	DM126	1367	DL607	1401	DO575
	1300	DK357	1334	DM128	1368	DL608	1402	DO589
	1301	DK360	1335	DM130	1369	DL616	1403	DO610
10	1302	DL141	1336	DM147	1370	DL619	1404	DO715
	1303	DL146	1337	DM169	1371	DL620	1405	DO722
	1304	DL162	1338	DM26	1372	DL634	1406	DO737
	1305	DL163	1339	DM404	1373	DM194	1407	DO742
	1306	DL169	1340	DM406	1374	DM197	1408	DO755
15	1307	DL181	1341	DM407	1375	DM221	1409	DO765
	1308	DL185	1342	DM420	1376	DM248	1410	DO797
	1309	DL218	1343	DM425	1377	DM250	1411	DO836
	1310	DL220	1344	DM435	1378	DM262	1412	DO884
	1311	DL248	1345	DM445	1379	DM265	1413	DO896
20	1312	DL289	1346	DM449	1380	DM272	1414	CZ549
	1313	DL290	1347	DM459	1381	DM278	1415	CZ598
	1314	DL291	1348	DM462	1382	DM293	1416	DT431
	1315	DL316	1349	DM469	1383	DM303	1417	DT443
	1316	DL320	1350	DM482	1384	DM340	1418	DT446
25	1317	DL321	1351	DM6	1385	DM360	1419	DT449
	1318	DL425	1352	DM94	1386	DM365	1420	DT450
	1319	DL426	1353	DJ279	1387	DM522	1421	DT455
	1320	DL427	1354	DJ284	1388	DM533	1422	DT458
	1321	DL439	1355	DJ299	1389	DM542	1423	DN106
30	1322	DL440	1356	DJ319	1390	DM87	1424	DN153
	1323	DL444	1357	DJ323	1391	DN124	1425	DN176
	1324	DL457	1358	DL531	1392	DN144	1426	DT530
	1325	DL463	1359	DL535	1393	DN147	1427	DT534
	1326	DL466	1360	DL543	1394	DN167	1428	DT535

	1429	DT544	1463	DW1	1497	BK5
	1430	DT563	1464	DW389	1498	BK504
	1431	DT584	1465	DW398	1499	BK513
	1432	DT590	1466	DW654	1500	BK517
5	1433	DT596	1467	DW659		
	1434	DT597	1468	DW665		
	1435	DT598	1469	DW694		
	1436	DT640	1470	DW705		
	1437	DT655	1471	DW716		
10	1438	DT674	1472	DW749		
	1439	DT719	1473	DW761		
	1440	DT734	1474	DW765		
	1441	DT779	1475	DW771		
	1442	DT801	1476	DW78		
15	1443	DT802	1477	DW780		
	1444	DN696	1478	BK10		
	1445	DN697	1479	BK11		
	1446	DN704	1480	BK2		
	1447	DN710	1481	BK368		
20	1448	DN711	1482	BK373		
	1449	DN714	1483	BK374		
	1450	DN721	1484	BK375		
	1451	DN722	1485	BK384		
	1452	DN732	1486	BK402		
25	1453	DN740	1487	BK410		
	1454	DN746	1488	BK415		
	1455	DN747	1489	BK425		
	1456	DN753	1490	BK427		
	1457	DN756	1491	BK436		
30	1458	DN764	1492	BK445		
	1459	DN770	1493	BK455		
	1460	DN772	1494	BK458		
	1461	DN1120	1495	BK494		
	1462	DU372	1496	BK498		

The "Clone ID No." for a particular clone consists of one or two letters followed by a number. The letters designate the tissue source from which the sEST was isolated. Table 3 below lists the various sources which were run through applicants' signal sequence trap. Thus, the tissue source for a particular sEST sequence can be identified in Table 3 by the one and two letter designations used in the relevant "Clone ID No.". For example, a clone designated as "BA312" would have been isolated from a human placenta (26 yrs.) library (i.e., selection "BA") as indicated in Table 3.

As used herein, "polynucleotide" includes single- and double-stranded RNAs, DNAs and RNA:DNA hybrids.

As used herein a "secreted" protein is one which, when expressed in a suitable host cell, is transported across or through a membrane, including transport as a result of signal sequences in its amino acid sequence. "Secreted" proteins include without limitation proteins secreted wholly (e.g., soluble proteins) or partially (e.g., receptors) from the cell in which they are expressed. "Secreted" proteins also include without limitation proteins which are transported across the membrane of the endoplasmic reticulum.

Fragments of the proteins of the present invention which are capable of exhibiting biological activity are also encompassed by the present invention. Fragments of the protein may be in linear form or they may be cyclized using known methods, for example, as described in H.U. Saragovi, *et al.*, *Bio/Technology* 10, 773-778 (1992) and in R.S. McDowell, *et al.*, *J. Amer. Chem. Soc.* 114, 9245-9253 (1992), both of which are incorporated herein by reference. Such fragments may be fused to carrier molecules such as immunoglobulins for many purposes, including increasing the valency of protein binding sites. For example, fragments of the protein may be fused through "linker" sequences to the Fc portion of an immunoglobulin. For a bivalent form of the protein, such a fusion could be to the Fc portion of an IgG molecule. Other immunoglobulin isotypes may also be used to generate such fusions. For example, a protein - IgM fusion would generate a decavalent form of the protein of the invention.

The present invention also provides both full-length and mature forms of the disclosed proteins. The full-length form of the such proteins is identified in the sequence listing by translation of the nucleotide sequence of each disclosed clone. The mature form of such protein may be obtained by expression of the disclosed full-length polynucleotide (preferably those deposited with ATCC) in a suitable mammalian cell or other host cell. The sequence of the mature form of the protein may also be determinable from the amino acid sequence of the full-length form.

The present invention also provides genes corresponding to the cDNA sequences disclosed herein. The corresponding genes can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include the preparation of probes or primers from the disclosed sequence information for identification
5 and/or amplification of genes in appropriate genomic libraries or other sources of genomic materials.

Where the protein of the present invention is membrane-bound (e.g., is a receptor), the present invention also provides for soluble forms of such protein. In such forms part or all of the intracellular and transmembrane domains of the protein are deleted such that
10 the protein is fully secreted from the cell in which it is expressed. The intracellular and transmembrane domains of proteins of the invention can be identified in accordance with known techniques for determination of such domains from sequence information.

Species homologs of the disclosed polynucleotides and proteins are also provided by the present invention. Species homologs may be isolated and identified by making
15 suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source from the desired species.

The invention also encompasses allelic variants of the disclosed polynucleotides or proteins; that is, naturally-occurring alternative forms of the isolated polynucleotide which also encode proteins which are identical, homologous or related to that encoded by the
20 polynucleotides disclosed herein.

The invention also includes polynucleotides with sequences complementary to those of the polynucleotides disclosed herein.

The present invention also includes polynucleotides capable of hybridizing, preferably under reduced stringency conditions, more preferably under stringent conditions,
25 most preferably under highly stringent conditions, to polynucleotides described herein. Examples of stringency conditions are shown in Table 1 below: highly stringent conditions are those that are at least as stringent as, for example, conditions A-F; stringent conditions are at least as stringent as, for example, conditions G-L; and reduced stringency conditions are at least as stringent as, for example, conditions M-R.

Table 1

	Stringency Condition	Polynucleotide Hybrid	Hybrid Length (bp) ²	Hybridization Temperature and Buffer ³	Wash Temperature and Buffer ⁴
5	A	DNA:DNA	≥ 50	65°C; 1xSSC -or- 42°C; 1xSSC, 50% formamide	65°C; 0.3xSSC
	B	DNA:DNA	< 50	T _B *; 1xSSC	T _B *; 1xSSC
	C	DNA:RNA	≥ 50	67°C; 1xSSC -or- 45°C; 1xSSC, 50% formamide	67°C; 0.3xSSC
	D	DNA:RNA	< 50	T _D *; 1xSSC	T _D *; 1xSSC
	E	RNA:RNA	≥ 50	70°C; 1xSSC -or- 50°C; 1xSSC, 50% formamide	70°C; 0.3xSSC
10	F	RNA:RNA	< 50	T _F *; 1xSSC	T _F *; 1xSSC
	G	DNA:DNA	≥ 50	65°C; 4xSSC -or- 42°C; 4xSSC, 50% formamide	65°C; 1xSSC
	H	DNA:DNA	< 50	T _H *; 4xSSC	T _H *; 4xSSC
	I	DNA:RNA	≥ 50	67°C; 4xSSC -or- 45°C; 4xSSC, 50% formamide	67°C; 1xSSC
	J	DNA:RNA	< 50	T _J *; 4xSSC	T _J *; 4xSSC
15	K	RNA:RNA	≥ 50	70°C; 4xSSC -or- 50°C; 4xSSC, 50% formamide	67°C; 1xSSC
	L	RNA:RNA	< 50	T _L *; 2xSSC	T _L *; 2xSSC
	M	DNA:DNA	≥ 50	50°C; 4xSSC -or- 40°C; 6xSSC, 50% formamide	50°C; 2xSSC
	N	DNA:DNA	< 50	T _N *; 6xSSC	T _N *; 6xSSC
	O	DNA:RNA	≥ 50	55°C; 4xSSC -or- 42°C; 6xSSC, 50% formamide	55°C; 2xSSC
20	P	DNA:RNA	< 50	T _P *; 6xSSC	T _P *; 6xSSC
	Q	RNA:RNA	≥ 50	60°C; 4xSSC -or- 45°C; 6xSSC, 50% formamide	60°C; 2xSSC
	R	RNA:RNA	< 50	T _R *; 4xSSC	T _R *; 4xSSC

²: The hybrid length is that anticipated for the hybridized region(s) of the hybridizing polynucleotides. When hybridizing a polynucleotide to a target polynucleotide of unknown sequence, the hybrid length is assumed to be that of the hybridizing polynucleotide. When polynucleotides of known sequence are hybridized, the hybrid length can be determined by aligning the sequences of the polynucleotides and identifying the region or regions of optimal sequence complementarity.

³: SSPE (1xSSPE is 0.15M NaCl, 10mM NaH₂PO₄, and 1.25mM EDTA, pH 7.4) can be substituted for SSC (1xSSC is 0.15M NaCl and 15mM sodium citrate) in the hybridization and wash buffers; washes are performed for 15 minutes after hybridization is complete.

*T_B - T_R: The hybridization temperature for hybrids anticipated to be less than 50 base pairs in length should be 5-10°C less than the melting temperature (T_m) of the hybrid, where T_m is determined according to the following equations. For hybrids less than 18 base pairs in length, T_m(°C) = 2(# of A + T bases) + 4(# of G + C bases). For hybrids between 18 and 49 base pairs in length, T_m(°C) = 81.5 + 16.6(log [Na⁺]) + 0.41(%G+C) - (600/N), where N is the number of bases in the hybrid, and [Na⁺] is the concentration of sodium ions in the hybridization buffer ([Na⁺] for 1xSSC = 0.165 M).

Additional examples of stringency conditions for polynucleotide hybridization are provided in Sambrook, J., E.F. Fritsch, and T. Maniatis, 1989, *Molecular Cloning: A Laboratory Manual*, Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY, chapters 9 and 11, and *Current Protocols in Molecular Biology*, 1995, F.M. Ausubel et al., eds., John Wiley & Sons, Inc., sections 2.10 and 6.3-6.4, incorporated herein by reference.

Preferably, such hybridizing polynucleotides have at least 70% sequence identity (more preferably, at least 80% identity; most preferably at least 90% or 95% identity) with the polynucleotide of the present invention to which they hybridize, where sequence identity is determined by comparing the sequences of the hybridizing polynucleotides when aligned so as to maximize overlap and identity while minimizing sequence gaps. ~~The isolated~~

polynucleotide encoding the protein of the invention may be operably linked to an expression control sequence such as the pMT2 or pED expression vectors disclosed in Kaufman *et al.*, *Nucleic Acids Res.* 19, 4485-4490 (1991), in order to produce the protein recombinantly. Many suitable expression control sequences are known in the art. General methods of expressing recombinant proteins are also known and are exemplified in R. Kaufman, *Methods in Enzymology* 185, 537-566 (1990). As defined herein "operably

linked" means that the isolated polynucleotide of the invention and an expression control

sequence are situated within a vector or cell in such a way that the protein is expressed by a host cell which has been transformed (transfected) with the ligated polynucleotide/expression control sequence.

A number of types of cells may act as suitable host cells for expression of the protein. Mammalian host cells include, for example, monkey COS cells, Chinese Hamster Ovary (CHO) cells, human kidney 293 cells, human epidermal A431 cells, human Colo205 cells, 3T3 cells, CV-1 cells, other transformed primate cell lines, normal diploid cells, cell strains derived from *in vitro* culture of primary tissue, primary explants, HeLa cells, mouse L cells, BHK, HL-60, U937, HaK or Jurkat cells.

Alternatively, it may be possible to produce the protein in lower eukaryotes such as yeast or in prokaryotes such as bacteria. Potentially suitable yeast strains include *Saccharomyces cerevisiae*, *Schizosaccharomyces pombe*, *Kluyveromyces* strains, *Candida*, or any yeast strain capable of expressing heterologous proteins. Potentially suitable bacterial strains include *Escherichia coli*, *Bacillus subtilis*, *Salmonella typhimurium*, or any bacterial strain capable of expressing heterologous proteins. If the protein is made in yeast or bacteria, it may be necessary to modify the protein produced therein, for example by phosphorylation or glycosylation of the appropriate sites, in order to obtain the functional protein. Such covalent attachments may be accomplished using known chemical or enzymatic methods.

The protein may also be produced by operably linking the isolated polynucleotide of the invention to suitable control sequences in one or more insect expression vectors, and employing an insect expression system. Materials and methods for baculovirus/insect cell expression systems are commercially available in kit form from, *e.g.*, Invitrogen, San Diego, California, U.S.A. (the MaxBac® kit), and such methods are well known in the art, as described in Summers and Smith, Texas Agricultural Experiment Station Bulletin No. 1555 (1987), incorporated herein by reference. As used herein, an insect cell capable of expressing a polynucleotide of the present invention is "transformed."

The protein of the invention may be prepared by culturing transformed host cells under culture conditions suitable to express the recombinant protein. The resulting expressed protein may then be purified from such culture (*i.e.*, from culture medium or cell extracts) using known purification processes, such as gel filtration and ion exchange chromatography. The purification of the protein may also include an affinity column containing agents which will bind to the protein; one or more column steps over such affinity resins as concanavalin A-agarose, heparin-toyopearl® or Cibacrom blue 3GA

Sepharose®; one or more steps involving hydrophobic interaction chromatography using such resins as phenyl ether, butyl ether, or propyl ether; or immunoaffinity chromatography.

Alternatively, the protein of the invention may also be expressed in a form which will facilitate purification. For example, it may be expressed as a fusion protein, such as those of maltose binding protein (MBP), glutathione-S-transferase (GST) or thioredoxin (TRX). Kits for expression and purification of such fusion proteins are commercially available from New England BioLab (Beverly, MA), Pharmacia (Piscataway, NJ) and InVitrogen, respectively. The protein can also be tagged with an epitope and subsequently purified by using a specific antibody directed to such epitope. One such epitope ("Flag") is commercially available from Kodak (New Haven, CT).

Finally, one or more reverse-phase high performance liquid chromatography (RP-HPLC) steps employing hydrophobic RP-HPLC media, e.g., silica gel having pendant methyl or other aliphatic groups, can be employed to further purify the protein. Some or all of the foregoing purification steps, in various combinations, can also be employed to provide a substantially homogeneous isolated recombinant protein. The protein thus purified is substantially free of other mammalian proteins and is defined in accordance with the present invention as an "isolated protein."

The protein of the invention may also be expressed as a product of transgenic animals, e.g., as a component of the milk of transgenic cows, goats, pigs, or sheep which are characterized by somatic or germ cells containing a nucleotide sequence encoding the protein.

The protein may also be produced by known conventional chemical synthesis. Methods for constructing the proteins of the present invention by synthetic means are known to those skilled in the art. The synthetically-constructed protein sequences, by virtue of sharing primary, secondary or tertiary structural and/or conformational characteristics with proteins may possess biological properties in common therewith, including protein activity. Thus, they may be employed as biologically active or immunological substitutes for natural, purified proteins in screening of therapeutic compounds and in immunological processes for the development of antibodies.

The proteins provided herein also include proteins characterized by amino acid sequences similar to those of purified proteins but into which modification are naturally provided or deliberately engineered. For example, modifications in the peptide or DNA sequences can be made by those skilled in the art using known techniques. Modifications

of interest in the protein sequences may include the alteration, substitution, replacement, insertion or deletion of a selected amino acid residue in the coding sequence. For example, one or more of the cysteine residues may be deleted or replaced with another amino acid to alter the conformation of the molecule. Techniques for such alteration, substitution, replacement, insertion or deletion are well known to those skilled in the art (see, e.g., U.S. Patent No. 4,518,584). Preferably, such alteration, substitution, replacement, insertion or deletion retains the desired activity of the protein.

Other fragments and derivatives of the sequences of proteins which would be expected to retain protein activity in whole or in part and may thus be useful for screening or other immunological methodologies may also be easily made by those skilled in the art given the disclosures herein. Such modifications are believed to be encompassed by the present invention.

USES AND BIOLOGICAL ACTIVITY

The polynucleotides and proteins of the present invention are expected to exhibit one or more of the uses or biological activities (including those associated with assays cited herein) identified below. Uses or activities described for proteins of the present invention
5 may be provided by administration or use of such proteins or by administration or use of polynucleotides encoding such proteins (such as, for example, in gene therapies or vectors suitable for introduction of DNA).

Research Uses and Utilities

10 The polynucleotides provided by the present invention can be used by the research community for various purposes. The primary use of polynucleotides of the invention which are sESTs is as probes for the identification and isolation of full-length cDNAs and genomic DNA molecules which correspond (i.e., is a longer polynucleotide sequence of which substantially the entire sEST is a fragment in the case of a full-length cDNA, or
15 which encodes the sEST in the case of a genomic DNA molecule) to such sESTs. Techniques for use of such sequences as probes for larger cDNAs or genomic molecules are well known in the art.

The polynucleotides can also be used to express recombinant protein for analysis, characterization or therapeutic use; as markers for tissues in which the corresponding
20 protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in disease states); as molecular weight markers on Southern gels; as chromosome markers or tags (when labeled) to identify chromosomes or to map related gene positions; to compare with endogenous DNA sequences in patients to identify potential genetic disorders; as probes to hybridize and thus discover novel, related
25 DNA sequences; as a source of information to derive PCR primers for genetic fingerprinting; as a probe to "subtract-out" known sequences in the process of discovering other novel polynucleotides; for selecting and making oligomers for attachment to a "gene chip" or other support, including for examination of expression patterns; to raise anti-protein antibodies using DNA immunization techniques; and as an antigen to raise anti-
30 DNA antibodies or elicit another immune response. Where the polynucleotide encodes a protein which binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the polynucleotide can also be used in interaction trap assays (such as, for example, that described in Gyuris et al., Cell 75:791-803 (1993)) to identify

polynucleotides encoding the other protein with which binding occurs or to identify inhibitors of the binding interaction.

The proteins provided by the present invention can similarly be used in assay to determine biological activity, including in a panel of multiple proteins for high-throughput screening; to raise antibodies or to elicit another immune response; as a reagent (including the labeled reagent) in assays designed to quantitatively determine levels of the protein (or its receptor) in biological fluids; as markers for tissues in which the corresponding protein is preferentially expressed (either constitutively or at a particular stage of tissue differentiation or development or in a disease state); and, of course, to isolate correlative receptors or ligands. Where the protein binds or potentially binds to another protein (such as, for example, in a receptor-ligand interaction), the protein can be used to identify the other protein with which binding occurs or to identify inhibitors of the binding interaction. Proteins involved in these binding interactions can also be used to screen for peptide or small molecule inhibitors or agonists of the binding interaction.

Any or all of these research utilities are capable of being developed into reagent grade or kit format for commercialization as research products.

Methods for performing the uses listed above are well known to those skilled in the art. References disclosing such methods include without limitation "Molecular Cloning: A Laboratory Manual", 2d ed., Cold Spring Harbor Laboratory Press, Sambrook, J., E.F. Fritsch and T. Maniatis eds., 1989, and "Methods in Enzymology: Guide to Molecular Cloning Techniques", Academic Press, Berger, S.L. and A.R. Kimmel eds., 1987.

Nutritional Uses

Polynucleotides and proteins of the present invention can also be used as nutritional sources or supplements. Such uses include without limitation use as a protein or amino acid supplement, use as a carbon source, use as a nitrogen source and use as a source of carbohydrate. In such cases the protein or polynucleotide of the invention can be added to the feed of a particular organism or can be administered as a separate solid or liquid preparation, such as in the form of powder, pills, solutions, suspensions or capsules. In the case of microorganisms, the protein or polynucleotide of the invention can be added to the medium in or on which the microorganism is cultured.

Cytokine and Cell Proliferation/Differentiation Activity

A protein of the present invention may exhibit cytokine, cell proliferation (either inducing or inhibiting) or cell differentiation (either inducing or inhibiting) activity or may induce production of other cytokines in certain cell populations. Many protein factors discovered to date, including all known cytokines, have exhibited activity in one or more factor dependent cell proliferation assays, and hence the assays serve as a convenient confirmation of cytokine activity. The activity of a protein of the present invention is evidenced by any one of a number of routine factor dependent cell proliferation assays for cell lines including, without limitation, 32D, DA2, DA1G, T10, B9, B9/11, BaF3, MC9/G, M+ (preB M+), 2E8, RB5, DA1, 123, T1165, HT2, CTLL2, TF-1, Mo7e and CMK.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for T-cell or thymocyte proliferation include without limitation those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bertagnolli et al., *J. Immunol.* 145:1706-1712, 1990; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Bertagnolli, et al., *J. Immunol.* 149:3778-3783, 1992; Bowman et al., *J. Immunol.* 152: 1756-1761, 1994.

Assays for cytokine production and/or proliferation of spleen cells, lymph node cells or thymocytes include, without limitation, those described in: Polyclonal T cell stimulation, Kruisbeek, A.M. and Shevach, E.M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.12.1-3.12.14, John Wiley and Sons, Toronto. 1994; and Measurement of mouse and human Interferon γ , Schreiber, R.D. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.8.1-6.8.8, John Wiley and Sons, Toronto. 1994.

Assays for proliferation and differentiation of hematopoietic and lymphopoietic cells include, without limitation, those described in: Measurement of Human and Murine Interleukin 2 and Interleukin 4, Bottomly, K., Davis, L.S. and Lipsky, P.E. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.3.1-6.3.12, John Wiley and Sons, Toronto. 1991; deVries et al., *J. Exp. Med.* 173:1205-1211, 1991; Moreau et al., *Nature* 336:690-692, 1988; Greenberger et al., *Proc. Natl. Acad. Sci. U.S.A.* 80:2931-2938, 1983; Measurement of mouse and human interleukin 6 - Nordan, R. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.6.1-6.6.5, John Wiley

- and Sons, Toronto. 1991; Smith et al., Proc. Natl. Acad. Sci. U.S.A. 83:1857-1861, 1986; Measurement of human Interleukin 11 - Bennett, F., Giannotti, J., Clark, S.C. and Turner, K. J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.15.1 John Wiley and Sons, Toronto. 1991; Measurement of mouse and human Interleukin 9 -
- 5 Ciarletta, A., Giannotti, J., Clark, S.C. and Turner, K.J. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 6.13.1, John Wiley and Sons, Toronto. 1991.

Assays for T-cell clone responses to antigens (which will identify, among others, proteins that affect APC-T cell interactions as well as direct T-cell effects by measuring proliferation and cytokine production) include, without limitation, those described in:

- 10 *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function; Chapter 6, Cytokines and their cellular receptors; Chapter 7, Immunologic studies in Humans); Weinberger et al., Proc. Natl. Acad. Sci. USA 77:6091-6095, 1980; Weinberger et al., Eur. J. Immun.
- 15 11:405-411, 1981; Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988.

Immune Stimulating or Suppressing Activity

- A protein of the present invention may also exhibit immune stimulating or immune
- 20 suppressing activity, including without limitation the activities for which assays are described herein. A protein may be useful in the treatment of various immune deficiencies and disorders (including severe combined immunodeficiency (SCID)), e.g., in regulating (up or down) growth and proliferation of T and/or B lymphocytes, as well as effecting the cytolytic activity of NK cells and other cell populations. These immune deficiencies may
- 25 be genetic or be caused by viral (e.g., HIV) as well as bacterial or fungal infections, or may result from autoimmune disorders. More specifically, infectious diseases caused by viral, bacterial, fungal or other infection may be treatable using a protein of the present invention, including infections by HIV, hepatitis viruses, herpesviruses, mycobacteria, *Leishmania* spp., malaria spp. and various fungal infections such as candidiasis. Of course,
- 30 in this regard, a protein of the present invention may also be useful where a boost to the immune system generally may be desirable, i.e., in the treatment of cancer.

Autoimmune disorders which may be treated using a protein of the present invention include, for example, connective tissue disease, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, autoimmune pulmonary inflammation, Guillain-Barre

syndrome, autoimmune thyroiditis, insulin dependent diabetes mellitis, myasthenia gravis, graft-versus-host disease and autoimmune inflammatory eye disease. Such a protein of the present invention may also be useful in the treatment of allergic reactions and conditions, such as asthma (particularly allergic asthma) or other respiratory problems. Other
5 conditions, in which immune suppression is desired (including, for example, organ transplantation), may also be treatable using a protein of the present invention.

Using the proteins of the invention it may also be possible to immune responses, in a number of ways. Down regulation may be in the form of inhibiting or blocking an immune response already in progress or may involve preventing the induction of an immune
10 response. The functions of activated T cells may be inhibited by suppressing T cell responses or by inducing specific tolerance in T cells, or both. Immunosuppression of T cell responses is generally an active, non-antigen-specific, process which requires continuous exposure of the T cells to the suppressive agent. Tolerance, which involves inducing non-responsiveness or anergy in T cells, is distinguishable from
15 immunosuppression in that it is generally antigen-specific and persists after exposure to the tolerizing agent has ceased. Operationally, tolerance can be demonstrated by the lack of a T cell response upon reexposure to specific antigen in the absence of the tolerizing agent.

Down regulating or preventing one or more antigen functions (including without limitation B lymphocyte antigen functions (such as, for example, B7)), *e.g.*, preventing
20 high level lymphokine synthesis by activated T cells, will be useful in situations of tissue, skin and organ transplantation and in graft-versus-host disease (GVHD). For example, blockage of T cell function should result in reduced tissue destruction in tissue transplantation. Typically, in tissue transplants, rejection of the transplant is initiated through its recognition as foreign by T cells, followed by an immune reaction that destroys
25 the transplant. The administration of a molecule which inhibits or blocks interaction of a B7 lymphocyte antigen with its natural ligand(s) on immune cells (such as a soluble, monomeric form of a peptide having B7-2 activity alone or in conjunction with a monomeric form of a peptide having an activity of another B lymphocyte antigen (*e.g.*, B7-1, B7-3) or blocking antibody), prior to transplantation can lead to the binding of the
30 molecule to the natural ligand(s) on the immune cells without transmitting the corresponding costimulatory signal. Blocking B lymphocyte antigen function in this manner prevents cytokine synthesis by immune cells, such as T cells, and thus acts as an immunosuppressant. Moreover, the lack of costimulation may also be sufficient to anergize the T cells, thereby inducing tolerance in a subject. Induction of long-term tolerance by B lymphocyte antigen-

blocking reagents may avoid the necessity of repeated administration of these blocking reagents. To achieve sufficient immunosuppression or tolerance in a subject, it may also be necessary to block the function of a combination of B lymphocyte antigens.

The efficacy of particular blocking reagents in preventing organ transplant rejection
5 or GVHD can be assessed using animal models that are predictive of efficacy in humans. Examples of appropriate systems which can be used include allogeneic cardiac grafts in rats and xenogeneic pancreatic islet cell grafts in mice, both of which have been used to examine the immunosuppressive effects of CTLA4Ig fusion proteins *in vivo* as described in Lenschow *et al.*, Science 257:789-792 (1992) and Turka *et al.*, Proc. Natl. Acad. Sci
10 USA, 89:11102-11105 (1992). In addition, murine models of GVHD (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 846-847) can be used to determine the effect of blocking B lymphocyte antigen function *in vivo* on the development of that disease.

Blocking antigen function may also be therapeutically useful for treating
15 autoimmune diseases. Many autoimmune disorders are the result of inappropriate activation of T cells that are reactive against self tissue and which promote the production of cytokines and autoantibodies involved in the pathology of the diseases. Preventing the activation of autoreactive T cells may reduce or eliminate disease symptoms. Administration of reagents which block costimulation of T cells by disrupting receptor:ligand interactions of B
20 lymphocyte antigens can be used to inhibit T cell activation and prevent production of autoantibodies or T cell-derived cytokines which may be involved in the disease process. Additionally, blocking reagents may induce antigen-specific tolerance of autoreactive T cells which could lead to long-term relief from the disease. The efficacy of blocking reagents in preventing or alleviating autoimmune disorders can be determined using a number of
25 well-characterized animal models of human autoimmune diseases. Examples include murine experimental autoimmune encephalitis, systemic lupus erythematosus in MRL/lpr/lpr mice or NZB hybrid mice, murine autoimmune collagen arthritis, diabetes mellitus in NOD mice and BB rats, and murine experimental myasthenia gravis (see Paul ed., Fundamental Immunology, Raven Press, New York, 1989, pp. 840-856).

30 Upregulation of an antigen function (preferably a B lymphocyte antigen function), as a means of up regulating immune responses, may also be useful in therapy. Upregulation of immune responses may be in the form of enhancing an existing immune response or eliciting an initial immune response. For example, enhancing an immune response through stimulating B lymphocyte antigen function may be useful in cases of viral

infection. In addition, systemic viral diseases such as influenza, the common cold, and encephalitis might be alleviated by the administration of stimulatory forms of B lymphocyte antigens systemically.

Alternatively, anti-viral immune responses may be enhanced in an infected patient
5 by removing T cells from the patient, costimulating the T cells *in vitro* with viral antigen-pulsed APCs either expressing a peptide of the present invention or together with a stimulatory form of a soluble peptide of the present invention and reintroducing the *in vitro* activated T cells into the patient. Another method of enhancing anti-viral immune responses would be to isolate infected cells from a patient, transfect them with a nucleic acid encoding
10 a protein of the present invention as described herein such that the cells express all or a portion of the protein on their surface, and reintroduce the transfected cells into the patient. The infected cells would now be capable of delivering a costimulatory signal to, and thereby activate, T cells *in vivo*.

In another application, up regulation or enhancement of antigen function (preferably
15 B lymphocyte antigen function) may be useful in the induction of tumor immunity. Tumor cells (*e.g.*, sarcoma, melanoma, lymphoma, leukemia, neuroblastoma, carcinoma) transfected with a nucleic acid encoding at least one peptide of the present invention can be administered to a subject to overcome tumor-specific tolerance in the subject. If desired, the tumor cell can be transfected to express a combination of peptides. For example, tumor
20 cells obtained from a patient can be transfected *ex vivo* with an expression vector directing the expression of a peptide having B7-2-like activity alone, or in conjunction with a peptide having B7-1-like activity and/or B7-3-like activity. The transfected tumor cells are returned to the patient to result in expression of the peptides on the surface of the transfected cell. Alternatively, gene therapy techniques can be used to target a tumor cell for transfection
25 *in vivo*.

The presence of the peptide of the present invention having the activity of a B lymphocyte antigen(s) on the surface of the tumor cell provides the necessary costimulation signal to T cells to induce a T cell mediated immune response against the transfected tumor cells. In addition, tumor cells which lack MHC class I or MHC class II molecules, or
30 which fail to reexpress sufficient amounts of MHC class I or MHC class II molecules, can be transfected with nucleic acid encoding all or a portion of (*e.g.*, a cytoplasmic-domain truncated portion) of an MHC class I α chain protein and β_2 microglobulin protein or an MHC class II α chain protein and an MHC class II β chain protein to thereby express MHC class I or MHC class II proteins on the cell surface. Expression of the appropriate class I

or class II MHC in conjunction with a peptide having the activity of a B lymphocyte antigen (e.g., B7-1, B7-2, B7-3) induces a T cell mediated immune response against the transfected tumor cell. Optionally, a gene encoding an antisense construct which blocks expression of an MHC class II associated protein, such as the invariant chain, can also be cotransfected with a DNA encoding a peptide having the activity of a B lymphocyte antigen to promote presentation of tumor associated antigens and induce tumor specific immunity. Thus, the induction of a T cell mediated immune response in a human subject may be sufficient to overcome tumor-specific tolerance in the subject.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for thymocyte or splenocyte cytotoxicity include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-3.19; Chapter 7, Immunologic studies in Humans); Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Takai et al., *J. Immunol.* 140:508-512, 1988; Herrmann et al., *Proc. Natl. Acad. Sci. USA* 78:2488-2492, 1981; Herrmann et al., *J. Immunol.* 128:1968-1974, 1982; Handa et al., *J. Immunol.* 135:1564-1572, 1985; Takai et al., *J. Immunol.* 137:3494-3500, 1986; Bowman et al., *J. Virology* 61:1992-1998; Takai et al., *J. Immunol.* 140:508-512, 1988; Bertagnolli et al., *Cellular Immunology* 133:327-341, 1991; Brown et al., *J. Immunol.* 153:3079-3092, 1994.

Assays for T-cell-dependent immunoglobulin responses and isotype switching (which will identify, among others, proteins that modulate T-cell dependent antibody responses and that affect Th1/Th2 profiles) include, without limitation, those described in: Maliszewski, *J. Immunol.* 144:3028-3033, 1990; and Assays for B cell function: *In vitro* antibody production, Mond, J.J. and Brunswick, M. In *Current Protocols in Immunology*. J.E.e.a. Coligan eds. Vol 1 pp. 3.8.1-3.8.16, John Wiley and Sons, Toronto. 1994.

Mixed lymphocyte reaction (MLR) assays (which will identify, among others, proteins that generate predominantly Th1 and CTL responses) include, without limitation, those described in: *Current Protocols in Immunology*, Ed by J. E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 3, In Vitro assays for Mouse Lymphocyte Function 3.1-

3.19; Chapter 7, Immunologic studies in Humans); Takai et al., J. Immunol. 137:3494-3500, 1986; Takai et al., J. Immunol. 140:508-512, 1988; Bertagnolli et al., J. Immunol. 149:3778-3783, 1992.

Dendritic cell-dependent assays (which will identify, among others, proteins expressed by dendritic cells that activate naive T-cells) include, without limitation, those described in: Guery et al., J. Immunol. 134:536-544, 1995; Inaba et al., Journal of Experimental Medicine 173:549-559, 1991; Macatonia et al., Journal of Immunology 154:5071-5079, 1995; Porgador et al., Journal of Experimental Medicine 182:255-260, 1995; Nair et al., Journal of Virology 67:4062-4069, 1993; Huang et al., Science 264:961-965, 1994; Macatonia et al., Journal of Experimental Medicine 169:1255-1264, 1989; Bhardwaj et al., Journal of Clinical Investigation 94:797-807, 1994; and Inaba et al., Journal of Experimental Medicine 172:631-640, 1990.

Assays for lymphocyte survival/apoptosis (which will identify, among others, proteins that prevent apoptosis after superantigen induction and proteins that regulate lymphocyte homeostasis) include, without limitation, those described in: Darzynkiewicz et al., Cytometry 13:795-808, 1992; Gorczyca et al., Leukemia 7:659-670, 1993; Gorczyca et al., Cancer Research 53:1945-1951, 1993; Itoh et al., Cell 66:233-243, 1991; Zacharchuk, Journal of Immunology 145:4037-4045, 1990; Zamai et al., Cytometry 14:891-897, 1993; Gorczyca et al., International Journal of Oncology 1:639-648, 1992.

Assays for proteins that influence early steps of T-cell commitment and development include, without limitation, those described in: Antica et al., Blood 84:111-117, 1994; Fine et al., Cellular Immunology 155:111-122, 1994; Galy et al., Blood 85:2770-2778, 1995; Toki et al., Proc. Nat. Acad Sci. USA 88:7548-7551, 1991.

Hematopoiesis Regulating Activity

A protein of the present invention may be useful in regulation of hematopoiesis and, consequently, in the treatment of myeloid or lymphoid cell deficiencies. Even marginal biological activity in support of colony forming cells or of factor-dependent cell lines indicates involvement in regulating hematopoiesis, e.g. in supporting the growth and proliferation of erythroid progenitor cells alone or in combination with other cytokines, thereby indicating utility, for example, in treating various anemias or for use in conjunction with irradiation/chemotherapy to stimulate the production of erythroid precursors and/or erythroid cells; in supporting the growth and proliferation of myeloid cells such as granulocytes and monocytes/macrophages (i.e., traditional CSF activity) useful, for

example, in conjunction with chemotherapy to prevent or treat consequent myelo-suppression; in supporting the growth and proliferation of megakaryocytes and consequently of platelets thereby allowing prevention or treatment of various platelet disorders such as thrombocytopenia, and generally for use in place of or complimentary to platelet
 5 transfusions; and/or in supporting the growth and proliferation of hematopoietic stem cells which are capable of maturing to any and all of the above-mentioned hematopoietic cells and therefore find therapeutic utility in various stem cell disorders (such as those usually treated with transplantation, including, without limitation, aplastic anemia and paroxysmal nocturnal hemoglobinuria), as well as in repopulating the stem cell compartment post
 10 irradiation/chemotherapy, either *in-vivo* or *ex-vivo* (i.e., in conjunction with bone marrow transplantation or with peripheral progenitor cell transplantation (homologous or heterologous)) as normal cells or genetically manipulated for gene therapy.

The activity of a protein of the invention may, among other means, be measured by the following methods:

15 Suitable assays for proliferation and differentiation of various hematopoietic lines are cited above.

Assays for embryonic stem cell differentiation (which will identify, among others, proteins that influence embryonic differentiation hematopoiesis) include, without limitation, those described in: Johansson et al. *Cellular Biology* 15:141-151, 1995; Keller et al.,
 20 *Molecular and Cellular Biology* 13:473-486, 1993; McClanahan et al., *Blood* 81:2903-2915, 1993.

Assays for stem cell survival and differentiation (which will identify, among others, proteins that regulate lympho-hematopoiesis) include, without limitation, those described in: Methylcellulose colony forming assays, Freshney, M.G. In *Culture of Hematopoietic*
 25 *Cells*. R.I. Freshney, et al. eds. Vol pp. 265-268, Wiley-Liss, Inc., New York, NY. 1994; Hirayama et al., *Proc. Natl. Acad. Sci. USA* 89:5907-5911, 1992; Primitive hematopoietic colony forming cells with high proliferative potential, McNiece, I.K. and Briddell, R.A. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 23-39, Wiley-Liss, Inc., New York, NY. 1994; Neben et al., *Experimental Hematology* 22:353-359, 1994;
 30 Cobblestone area forming cell assay, Ploemacher, R.E. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 1-21, Wiley-Liss, Inc., New York, NY. 1994; Long term bone marrow cultures in the presence of stromal cells, Spooncer, E., Dexter, M. and Allen, T. In *Culture of Hematopoietic Cells*. R.I. Freshney, et al. eds. Vol pp. 163-179, Wiley-Liss, Inc., New York, NY. 1994; Long term culture initiating cell assay, Sutherland,

H.J. In *Culture of Hematopoietic Cells*. R.I. Freshney, *et al.* eds. Vol pp. 139-162, Wiley-Liss, Inc., New York, NY. 1994.

Tissue Growth Activity

5 A protein of the present invention also may have utility in compositions used for bone, cartilage, tendon, ligament and/or nerve tissue growth or regeneration, as well as for wound healing and tissue repair and replacement, and in the treatment of burns, incisions and ulcers.

10 A protein of the present invention, which induces cartilage and/or bone growth in circumstances where bone is not normally formed, has application in the healing of bone fractures and cartilage damage or defects in humans and other animals. Such a preparation employing a protein of the invention may have prophylactic use in closed as well as open fracture reduction and also in the improved fixation of artificial joints. *De novo* bone formation induced by an osteogenic agent contributes to the repair of congenital, trauma
15 induced, or oncologic resection induced craniofacial defects, and also is useful in cosmetic plastic surgery.

A protein of this invention may also be used in the treatment of periodontal disease, and in other tooth repair processes. Such agents may provide an environment to attract bone-forming cells, stimulate growth of bone-forming cells or induce differentiation of
20 progenitors of bone-forming cells. A protein of the invention may also be useful in the treatment of osteoporosis or osteoarthritis, such as through stimulation of bone and/or cartilage repair or by blocking inflammation or processes of tissue destruction (collagenase activity, osteoclast activity, etc.) mediated by inflammatory processes.

Another category of tissue regeneration activity that may be attributable to the
25 protein of the present invention is tendon/ligament formation. A protein of the present invention, which induces tendon/ligament-like tissue or other tissue formation in circumstances where such tissue is not normally formed, has application in the healing of tendon or ligament tears, deformities and other tendon or ligament defects in humans and other animals. Such a preparation employing a tendon/ligament-like tissue inducing protein
30 may have prophylactic use in preventing damage to tendon or ligament tissue, as well as use in the improved fixation of tendon or ligament to bone or other tissues, and in repairing defects to tendon or ligament tissue. *De novo* tendon/ligament-like tissue formation induced by a composition of the present invention contributes to the repair of congenital, trauma induced, or other tendon or ligament defects of other origin, and is also useful in cosmetic

plastic surgery for attachment or repair of tendons or ligaments. The compositions of the present invention may provide an environment to attract tendon- or ligament-forming cells, stimulate growth of tendon- or ligament-forming cells, induce differentiation of progenitors of tendon- or ligament-forming cells, or induce growth of tendon/ligament cells or
5 progenitors *ex vivo* for return *in vivo* to effect tissue repair. The compositions of the invention may also be useful in the treatment of tendinitis, carpal tunnel syndrome and other tendon or ligament defects. The compositions may also include an appropriate matrix and/or sequestering agent as a carrier as is well known in the art.

The protein of the present invention may also be useful for proliferation of neural
10 cells and for regeneration of nerve and brain tissue, *i.e.* for the treatment of central and peripheral nervous system diseases and neuropathies, as well as mechanical and traumatic disorders, which involve degeneration, death or trauma to neural cells or nerve tissue. More specifically, a protein may be used in the treatment of diseases of the peripheral nervous system, such as peripheral nerve injuries, peripheral neuropathy and localized
15 neuropathies, and central nervous system diseases, such as Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic lateral sclerosis, and Shy-Drager syndrome. Further conditions which may be treated in accordance with the present invention include mechanical and traumatic disorders, such as spinal cord disorders, head trauma and cerebrovascular diseases such as stroke. Peripheral neuropathies resulting from
20 chemotherapy or other medical therapies may also be treatable using a protein of the invention.

Proteins of the invention may also be useful to promote better or faster closure of non-healing wounds, including without limitation pressure ulcers, ulcers associated with vascular insufficiency, surgical and traumatic wounds, and the like.

25 It is expected that a protein of the present invention may also exhibit activity for generation or regeneration of other tissues, such as organs (including, for example, pancreas, liver, intestine, kidney, skin, endothelium), muscle (smooth, skeletal or cardiac) and vascular (including vascular endothelium) tissue, or for promoting the growth of cells comprising such tissues. Part of the desired effects may be by inhibition or modulation of
30 fibrotic scarring to allow normal tissue to regenerate. A protein of the invention may also exhibit angiogenic activity.

A protein of the present invention may also be useful for gut protection or regeneration and treatment of lung or liver fibrosis, reperfusion injury in various tissues, and conditions resulting from systemic cytokine damage.

A protein of the present invention may also be useful for promoting or inhibiting differentiation of tissues described above from precursor tissues or cells; or for inhibiting the growth of tissues described above.

The activity of a protein of the invention may, among other means, be measured
5 by the following methods:

Assays for tissue generation activity include, without limitation, those described in: International Patent Publication No. WO95/16035 (bone, cartilage, tendon); International Patent Publication No. WO95/05846 (nerve, neuronal); International Patent Publication No. WO91/07491 (skin, endothelium).

10 Assays for wound healing activity include, without limitation, those described in: Winter, Epidermal Wound Healing, pps. 71-112 (Maibach, HI and Rovee, DT, eds.), Year Book Medical Publishers, Inc., Chicago, as modified by Eaglstein and Mertz, J. Invest. Dermatol 71:382-84 (1978).

15 Activin/Inhibin Activity

A protein of the present invention may also exhibit activin- or inhibin-related activities. Inhibins are characterized by their ability to inhibit the release of follicle stimulating hormone (FSH), while activins are characterized by their ability to stimulate the release of follicle stimulating hormone (FSH). Thus, a protein of the present invention,
20 alone or in heterodimers with a member of the inhibin α family, may be useful as a contraceptive based on the ability of inhibins to decrease fertility in female mammals and decrease spermatogenesis in male mammals. Administration of sufficient amounts of other inhibins can induce infertility in these mammals. Alternatively, the protein of the invention, as a homodimer or as a heterodimer with other protein subunits of the inhibin- β group, may
25 be useful as a fertility inducing therapeutic, based upon the ability of activin molecules in stimulating FSH release from cells of the anterior pituitary. See, for example, United States Patent 4,798,885. A protein of the invention may also be useful for advancement of the onset of fertility in sexually immature mammals, so as to increase the lifetime reproductive performance of domestic animals such as cows, sheep and pigs.

30 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for activin/inhibin activity include, without limitation, those described in: Vale et al., Endocrinology 91:562-572, 1972; Ling et al., Nature 321:779-782, 1986; Vale

et al., Nature 321:776-779, 1986; Mason et al., Nature 318:659-663, 1985; Forage et al., Proc. Natl. Acad. Sci. USA 83:3091-3095, 1986.

Chemotactic/Chemokinetic Activity

5 A protein of the present invention may have chemotactic or chemokinetic activity (e.g., act as a chemokine) for mammalian cells, including, for example, monocytes, fibroblasts, neutrophils, T-cells, mast cells, eosinophils, epithelial and/or endothelial cells. Chemotactic and chemokinetic proteins can be used to mobilize or attract a desired cell population to a desired site of action. Chemotactic or chemokinetic proteins provide
10 particular advantages in treatment of wounds and other trauma to tissues, as well as in treatment of localized infections. For example, attraction of lymphocytes, monocytes or neutrophils to tumors or sites of infection may result in improved immune responses against the tumor or infecting agent.

A protein or peptide has chemotactic activity for a particular cell population if it can
15 stimulate, directly or indirectly, the directed orientation or movement of such cell population. Preferably, the protein or peptide has the ability to directly stimulate directed movement of cells. Whether a particular protein has chemotactic activity for a population of cells can be readily determined by employing such protein or peptide in any known assay for cell chemotaxis.

20 The activity of a protein of the invention may, among other means, be measured by the following methods:

Assays for chemotactic activity (which will identify proteins that induce or prevent chemotaxis) consist of assays that measure the ability of a protein to induce the migration of cells across a membrane as well as the ability of a protein to induce the adhesion of one
25 cell population to another cell population. Suitable assays for movement and adhesion include, without limitation, those described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 6.12, Measurement of alpha and beta Chemokines 6.12.1-6.12.28; Taub et al. J. Clin. Invest. 95:1370-1376, 1995; Lind et
30 al. APMIS 103:140-146, 1995; Muller et al Eur. J. Immunol. 25: 1744-1748; Gruber et al. J. of Immunol. 152:5860-5867, 1994; Johnston et al. J. of Immunol. 153: 1762-1768, 1994.

Hemostatic and Thrombolytic Activity

A protein of the invention may also exhibit hemostatic or thrombolytic activity. As a result, such a protein is expected to be useful in treatment of various coagulation disorders (including hereditary disorders, such as hemophilias) or to enhance coagulation and other hemostatic events in treating wounds resulting from trauma, surgery or other causes. A
5 protein of the invention may also be useful for dissolving or inhibiting formation of thromboses and for treatment and prevention of conditions resulting therefrom (such as, for example, infarction of cardiac and central nervous system vessels (e.g., stroke).

The activity of a protein of the invention may, among other means, be measured by the following methods:

10 Assay for hemostatic and thrombolytic activity include, without limitation, those described in: Linet et al., J. Clin. Pharmacol. 26:131-140, 1986; Burdick et al., Thrombosis Res. 45:413-419, 1987; Humphrey et al., Fibrinolysis 5:71-79 (1991); Schaub, Prostaglandins 35:467-474, 1988.

15 Receptor/Ligand Activity

A protein of the present invention may also demonstrate activity as receptors, receptor ligands or inhibitors or agonists of receptor/ligand interactions. Examples of such receptors and ligands include, without limitation, cytokine receptors and their ligands, receptor kinases and their ligands, receptor phosphatases and their ligands, receptors
20 involved in cell-cell interactions and their ligands (including without limitation, cellular adhesion molecules (such as selectins, integrins and their ligands) and receptor/ligand pairs involved in antigen presentation, antigen recognition and development of cellular and humoral immune responses). Receptors and ligands are also useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interaction.
25 A protein of the present invention (including, without limitation, fragments of receptors and ligands) may themselves be useful as inhibitors of receptor/ligand interactions.

The activity of a protein of the invention may, among other means, be measured by the following methods:

Suitable assays for receptor-ligand activity include without limitation those
30 described in: Current Protocols in Immunology, Ed by J.E. Coligan, A.M. Kruisbeek, D.H. Margulies, E.M. Shevach, W. Strober, Pub. Greene Publishing Associates and Wiley-Interscience (Chapter 7.28, Measurement of Cellular Adhesion under static conditions 7.28.1-7.28.22), Takai et al., Proc. Natl. Acad. Sci. USA 84:6864-6868, 1987; Bierer et al., J. Exp. Med. 168:1145-1156, 1988; Rosenstein et al., J. Exp. Med.

169:149-160 1989; Stoltenborger et al., J. Immunol. Methods 175:59-68, 1994; Stitt et al., Cell 80:661-670, 1995.

Anti-Inflammatory Activity

5 Proteins of the present invention may also exhibit anti-inflammatory activity. The anti-inflammatory activity may be achieved by providing a stimulus to cells involved in the inflammatory response, by inhibiting or promoting cell-cell interactions (such as, for example, cell adhesion), by inhibiting or promoting chemotaxis of cells involved in the inflammatory process, inhibiting or promoting cell extravasation, or by stimulating or
10 suppressing production of other factors which more directly inhibit or promote an inflammatory response. Proteins exhibiting such activities can be used to treat inflammatory conditions including chronic or acute conditions), including without limitation inflammation associated with infection (such as septic shock, sepsis or systemic inflammatory response syndrome (SIRS)), ischemia-reperfusion injury, endotoxin lethality,
15 arthritis, complement-mediated hyperacute rejection, nephritis, cytokine or chemokine-induced lung injury, inflammatory bowel disease, Crohn's disease or resulting from over production of cytokines such as TNF or IL-1. Proteins of the invention may also be useful to treat anaphylaxis and hypersensitivity to an antigenic substance or material.

Tumor Inhibition Activity

In addition to the activities described above for immunological treatment or prevention of tumors, a protein of the invention may exhibit other anti-tumor activities. A protein may inhibit tumor growth directly or indirectly (such as, for example, via ADCC). A protein may exhibit its tumor inhibitory activity by acting on tumor tissue or tumor
25 precursor tissue, by inhibiting formation of tissues necessary to support tumor growth (such as, for example, by inhibiting angiogenesis), by causing production of other factors, agents or cell types which inhibit tumor growth, or by suppressing, eliminating or inhibiting factors, agents or cell types which promote tumor growth.

30

Other Activities

A protein of the invention may also exhibit one or more of the following additional activities or effects: inhibiting the growth, infection or function of, or killing, infectious agents, including, without limitation, bacteria, viruses, fungi and other parasites; effecting

(suppressing or enhancing) bodily characteristics, including, without limitation, height, weight, hair color, eye color, skin, fat to lean ratio or other tissue pigmentation, or organ or body part size or shape (such as, for example, breast augmentation or diminution, change in bone form or shape); effecting biorhythms or circadian cycles or rhythms; effecting the fertility of male or female subjects; effecting the metabolism, catabolism, anabolism, processing, utilization, storage or elimination of dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors or other nutritional factors or component(s); effecting behavioral characteristics, including, without limitation, appetite, libido, stress, cognition (including cognitive disorders), depression (including depressive disorders) and violent behaviors; providing analgesic effects or other pain reducing effects; promoting differentiation and growth of embryonic stem cells in lineages other than hematopoietic lineages; hormonal or endocrine activity; in the case of enzymes, correcting deficiencies of the enzyme and treating deficiency-related diseases; treatment of hyperproliferative disorders (such as, for example, psoriasis); immunoglobulin-like activity (such as, for example, the ability to bind antigens or complement); and the ability to act as an antigen in a vaccine composition to raise an immune response against such protein or another material or entity which is cross-reactive with such protein.

ADMINISTRATION AND DOSING

A protein of the present invention (from whatever source derived, including without limitation from recombinant and non-recombinant sources) may be used in a pharmaceutical composition when combined with a pharmaceutically acceptable carrier. Such a composition may also contain (in addition to protein and a carrier) diluents, fillers, salts, buffers, stabilizers, solubilizers, and other materials well known in the art. The term "pharmaceutically acceptable" means a non-toxic material that does not interfere with the effectiveness of the biological activity of the active ingredient(s). The characteristics of the carrier will depend on the route of administration. The pharmaceutical composition of the invention may also contain cytokines, lymphokines, or other hematopoietic factors such as M-CSF, GM-CSF, TNF, IL-1, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12, IL-13, IL-14, IL-15, IFN, TNF0, TNF1, TNF2, G-CSF, Meg-CSF, thrombopoietin, stem cell factor, and erythropoietin. The pharmaceutical composition may further contain other agents which either enhance the activity of the protein or compliment its activity or use in treatment. Such additional factors and/or agents may be included in the pharmaceutical composition to produce a synergistic effect with protein of the invention, or to minimize side effects. Conversely, protein of the present invention may be included in formulations of the particular cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent to minimize side effects of the cytokine, lymphokine, other hematopoietic factor, thrombolytic or anti-thrombotic factor, or anti-inflammatory agent.

A protein of the present invention may be active in multimers (e.g., heterodimers or homodimers) or complexes with itself or other proteins. As a result, pharmaceutical compositions of the invention may comprise a protein of the invention in such multimeric or complexed form.

The pharmaceutical composition of the invention may be in the form of a complex of the protein(s) of present invention along with protein or peptide antigens. The protein and/or peptide antigen will deliver a stimulatory signal to both B and T lymphocytes. B lymphocytes will respond to antigen through their surface immunoglobulin receptor. T lymphocytes will respond to antigen through the T cell receptor (TCR) following presentation of the antigen by MHC proteins. MHC and structurally related proteins including those encoded by class I and class II MHC genes on host cells will serve to present the peptide antigen(s) to T lymphocytes. The antigen components could also be supplied as purified MHC-peptide complexes alone or with co-stimulatory molecules that

can directly signal T cells. Alternatively antibodies able to bind surface immunoglobulin and other molecules on B cells as well as antibodies able to bind the TCR and other molecules on T cells can be combined with the pharmaceutical composition of the invention.

5 The pharmaceutical composition of the invention may be in the form of a liposome in which protein of the present invention is combined, in addition to other pharmaceutically acceptable carriers, with amphipathic agents such as lipids which exist in aggregated form as micelles, insoluble monolayers, liquid crystals, or lamellar layers in aqueous solution. Suitable lipids for liposomal formulation include, without limitation, monoglycerides, diglycerides, sulfatides, lysolecithin, phospholipids, saponin, bile acids, and the like. Preparation of such liposomal formulations is within the level of skill in the art, as disclosed, for example, in U.S. Patent No. 4,235,871; U.S. Patent No. 4,501,728; U.S. Patent No. 4,837,028; and U.S. Patent No. 4,737,323, all of which are incorporated herein by reference.

15 As used herein, the term "therapeutically effective amount" means the total amount of each active component of the pharmaceutical composition or method that is sufficient to show a meaningful patient benefit, i.e., treatment, healing, prevention or amelioration of the relevant medical condition, or an increase in rate of treatment, healing, prevention or amelioration of such conditions. When applied to an individual active ingredient, administered alone, the term refers to that ingredient alone. When applied to a combination, the term refers to combined amounts of the active ingredients that result in the therapeutic effect, whether administered in combination, serially or simultaneously.

In practicing the method of treatment or use of the present invention, a therapeutically effective amount of protein of the present invention is administered to a mammal having a condition to be treated. Protein of the present invention may be administered in accordance with the method of the invention either alone or in combination with other therapies such as treatments employing cytokines, lymphokines or other hematopoietic factors. When co-administered with one or more cytokines, lymphokines or other hematopoietic factors, protein of the present invention may be administered either simultaneously with the cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors, or sequentially. If administered sequentially, the attending physician will decide on the appropriate sequence of administering protein of the present invention in combination with cytokine(s), lymphokine(s), other hematopoietic factor(s), thrombolytic or anti-thrombotic factors.

Administration of protein of the present invention used in the pharmaceutical composition or to practice the method of the present invention can be carried out in a variety of conventional ways, such as oral ingestion, inhalation, topical application or cutaneous, subcutaneous, intraperitoneal, parenteral or intravenous injection. Intravenous administration to the patient is preferred.

When a therapeutically effective amount of protein of the present invention is administered orally, protein of the present invention will be in the form of a tablet, capsule, powder, solution or elixir. When administered in tablet form, the pharmaceutical composition of the invention may additionally contain a solid carrier such as a gelatin or an adjuvant. The tablet, capsule, and powder contain from about 5 to 95% protein of the present invention, and preferably from about 25 to 90% protein of the present invention. When administered in liquid form, a liquid carrier such as water, petroleum, oils of animal or plant origin such as peanut oil, mineral oil, soybean oil, or sesame oil, or synthetic oils may be added. The liquid form of the pharmaceutical composition may further contain physiological saline solution, dextrose or other saccharide solution, or glycols such as ethylene glycol, propylene glycol or polyethylene glycol. When administered in liquid form, the pharmaceutical composition contains from about 0.5 to 90% by weight of protein of the present invention, and preferably from about 1 to 50% protein of the present invention.

When a therapeutically effective amount of protein of the present invention is administered by intravenous, cutaneous or subcutaneous injection, protein of the present invention will be in the form of a pyrogen-free, parenterally acceptable aqueous solution. The preparation of such parenterally acceptable protein solutions, having due regard to pH, isotonicity, stability, and the like, is within the skill in the art. A preferred pharmaceutical composition for intravenous, cutaneous, or subcutaneous injection should contain, in addition to protein of the present invention, an isotonic vehicle such as Sodium Chloride Injection, Ringer's Injection, Dextrose Injection, Dextrose and Sodium Chloride Injection, Lactated Ringer's Injection, or other vehicle as known in the art. The pharmaceutical composition of the present invention may also contain stabilizers, preservatives, buffers, antioxidants, or other additives known to those of skill in the art.

The amount of protein of the present invention in the pharmaceutical composition of the present invention will depend upon the nature and severity of the condition being treated, and on the nature of prior treatments which the patient has undergone. Ultimately, the attending physician will decide the amount of protein of the present invention with

which to treat each individual patient. Initially, the attending physician will administer low doses of protein of the present invention and observe the patient's response. Larger doses of protein of the present invention may be administered until the optimal therapeutic effect is obtained for the patient, and at that point the dosage is not increased further. It is contemplated that the various pharmaceutical compositions used to practice the method of the present invention should contain about 0.01 μ g to about 100 mg (preferably about 0.1 mg to about 10 mg, more preferably about 0.1 μ g to about 1 mg) of protein of the present invention per kg body weight.

The duration of intravenous therapy using the pharmaceutical composition of the present invention will vary, depending on the severity of the disease being treated and the condition and potential idiosyncratic response of each individual patient. It is contemplated that the duration of each application of the protein of the present invention will be in the range of 12 to 24 hours of continuous intravenous administration. Ultimately the attending physician will decide on the appropriate duration of intravenous therapy using the pharmaceutical composition of the present invention.

Protein of the invention may also be used to immunize animals to obtain polyclonal and monoclonal antibodies which specifically react with the protein. Such antibodies may be obtained using either the entire protein or fragments thereof as an immunogen. The peptide immunogens additionally may contain a cysteine residue at the carboxyl terminus, and are conjugated to a hapten such as keyhole limpet hemocyanin (KLH). Methods for synthesizing such peptides are known in the art, for example, as in R.P. Merrifield, J. Amer.Chem.Soc. 85, 2149-2154 (1963); J.L. Krstenansky, *et al.*, FEBS Lett. 211, 10 (1987). Monoclonal antibodies binding to the protein of the invention may be useful diagnostic agents for the immunodetection of the protein. Neutralizing monoclonal antibodies binding to the protein may also be useful therapeutics for both conditions associated with the protein and also in the treatment of some forms of cancer where abnormal expression of the protein is involved. In the case of cancerous cells or leukemic cells, neutralizing monoclonal antibodies against the protein may be useful in detecting and preventing the metastatic spread of the cancerous cells, which may be mediated by the protein.

For compositions of the present invention which are useful for bone, cartilage, tendon or ligament regeneration, the therapeutic method includes administering the composition topically, systemically, or locally as an implant or device. When administered, the therapeutic composition for use in this invention is, of course, in a

pyrogen-free, physiologically acceptable form. Further, the composition may desirably be encapsulated or injected in a viscous form for delivery to the site of bone, cartilage or tissue damage. Topical administration may be suitable for wound healing and tissue repair. Therapeutically useful agents other than a protein of the invention which may also
5 optionally be included in the composition as described above, may alternatively or additionally, be administered simultaneously or sequentially with the composition in the methods of the invention. Preferably for bone and/or cartilage formation, the composition would include a matrix capable of delivering the protein-containing composition to the site of bone and/or cartilage damage, providing a structure for the developing bone and
10 cartilage and optimally capable of being resorbed into the body. Such matrices may be formed of materials presently in use for other implanted medical applications.

The choice of matrix material is based on biocompatibility, biodegradability, mechanical properties, cosmetic appearance and interface properties. The particular application of the compositions will define the appropriate formulation. Potential matrices
15 for the compositions may be biodegradable and chemically defined calcium sulfate, tricalciumphosphate, hydroxyapatite, polylactic acid, polyglycolic acid and polyanhydrides. Other potential materials are biodegradable and biologically well-defined, such as bone or dermal collagen. Further matrices are comprised of pure proteins or extracellular matrix components. Other potential matrices are nonbiodegradable and chemically defined, such
20 as sintered hydroxapatite, bioglass, aluminates, or other ceramics. Matrices may be comprised of combinations of any of the above mentioned types of material, such as polylactic acid and hydroxyapatite or collagen and tricalciumphosphate. The bioceramics may be altered in composition, such as in calcium-aluminate-phosphate and processing to alter pore size, particle size, particle shape, and biodegradability.

25 Presently preferred is a 50:50 (mole weight) copolymer of lactic acid and glycolic acid in the form of porous particles having diameters ranging from 150 to 800 microns. In some applications, it will be useful to utilize a sequestering agent, such as carboxymethyl cellulose or autologous blood clot, to prevent the protein compositions from disassociating from the matrix.

30 A preferred family of sequestering agents is cellulosic materials such as alkylcelluloses (including hydroxyalkylcelluloses), including methylcellulose, ethylcellulose, hydroxyethylcellulose, hydroxypropylcellulose, hydroxypropyl-methylcellulose, and carboxymethylcellulose, the most preferred being cationic salts of carboxymethylcellulose (CMC). Other preferred sequestering agents include hyaluronic acid, sodium alginate,

poly(ethylene glycol), polyoxyethylene oxide, carboxyvinyl polymer and poly(vinyl alcohol). The amount of sequestering agent useful herein is 0.5-20 wt%, preferably 1-10 wt% based on total formulation weight, which represents the amount necessary to prevent desorption of the protein from the polymer matrix and to provide appropriate handling of the composition, yet not so much that the progenitor cells are prevented from infiltrating the matrix, thereby providing the protein the opportunity to assist the osteogenic activity of the progenitor cells.

In further compositions, proteins of the invention may be combined with other agents beneficial to the treatment of the bone and/or cartilage defect, wound, or tissue in question. These agents include various growth factors such as epidermal growth factor (EGF), platelet derived growth factor (PDGF), transforming growth factors (TGF- α and TGF- β), and insulin-like growth factor (IGF).

The therapeutic compositions are also presently valuable for veterinary applications. Particularly domestic animals and thoroughbred horses, in addition to humans, are desired patients for such treatment with proteins of the present invention.

The dosage regimen of a protein-containing pharmaceutical composition to be used in tissue regeneration will be determined by the attending physician considering various factors which modify the action of the proteins, e.g., amount of tissue weight desired to be formed, the site of damage, the condition of the damaged tissue, the size of a wound, type of damaged tissue (e.g., bone), the patient's age, sex, and diet, the severity of any infection, time of administration and other clinical factors. The dosage may vary with the type of matrix used in the reconstitution and with inclusion of other proteins in the pharmaceutical composition. For example, the addition of other known growth factors, such as IGF I (insulin like growth factor I), to the final composition, may also effect the dosage. Progress can be monitored by periodic assessment of tissue/bone growth and/or repair, for example, X-rays, histomorphometric determinations and tetracycline labeling.

Polynucleotides of the present invention can also be used for gene therapy. Such polynucleotides can be introduced either *in vivo* or *ex vivo* into cells for expression in a mammalian subject. Polynucleotides of the invention may also be administered by other known methods for introduction of nucleic acid into a cell or organism (including, without limitation, in the form of viral vectors or naked DNA).

Cells may also be cultured *ex vivo* in the presence of proteins of the present invention in order to proliferate or to produce a desired effect on or activity in such cells. Treated cells can then be introduced *in vivo* for therapeutic purposes.

Patent and literature references cited herein are incorporated by reference as if fully set forth.

Table 3

Sel.	Species	Tissue	Cell Type
AA	Human	Kidney	19-23wks., M/F pool of 5
AB	Human	Fetal Lung	Fetal Lung
AC	Human	Placenta	26yrs., 1 specimen
AD	Murine	Embryo	Fetal ES cells
AE	Murine	Spleen	Adult spleen
AF	Murine	Fetal Brain	Fetal Brain
AG	Murine	Fetal Brain	Fetal Brain
AH	Murine	Fetal Thymus	Fetal Thymus
AI	Human	Blood	Adult PBMC/TH1or2
AJ	Human	Testes	10-61yrs., pool of 11
AK	Human	Kidney	19-23wks., M/F pool of 5
AL	Human	Neural	Adult Glioblastoma line TG-1
AM	Human	Kidney	19-23wks., M/F pool of 5
AN	Murine	Bone Marrow	Adult Stromal cell line FCM-4
AO	Murine	Thymus	Adult Subtr. Adult Thymus
AP	Human	Placenta	26yrs., 1 specimen
AQ	Human	Ovary	PA-1 Teratocarcinoma
AR	Human	Retina	16-75yrs., pool of 76
AS	Human	Brain	19-23wks., M/F pool of 5
AT	Human	Blood	Adult lymphocytes+dend. cells
AU	Human	Testes	10-61yrs., pool of 11
AV	Murine	Spleen	Adult spleen
AW	Human	Ovary	PA-1 Teratocarcinoma
AX	Human	Testes	10-61yrs., pool of 11
AY	Human	Retina	16-75yrs., pool of 76
AZ	Human	Colon	Caco-2 Adenocarcinoma
B	Human	Blood	PeripheralBloodMononuclearCell
BA	Human	Placenta	26yrs., 1 specimen
BB	Human	Blood	Adult PBMC/TH1or2
BC	Murine	Embryo	Fetal ES cells
BD	Human	Kidney	19-23wks., M/F pool of 5
BE	Human	Blood	Adult PBMC/TH1or2
BF	Human	Brain	19-23wks., M/F pool of 5
BG	Human	Brain	N/A
BH	Human	Ovary	PA-1 Teratocarcinoma
BI	Human	Kidney	19-23wks., M/F pool of 5
BJ	Human	Ovary	PA-1 Teratocarcinoma
BK	Human	Retina	16-75yrs., pool of 76
BL	Human	Testes	10-61yrs., pool of 11
BM	Human	Muscle	N/A
BN	Human	Placenta	26yrs., 1 specimen
BO	Human	Retina	16-75yrs., pool of 76
BP	Human	Kidney	19-23wks., M/F pool of 5
BQ	Human	Colon	Caco-2 Adenocarcinoma Caco2

BR	Human	Kidney	19-23wks., M/F pool of 5
BS	Human	Pituitary	Adult Pituitary
BT	Human	Blood	Adult PBMC
BU	Human	Placenta	26yrs., 1 specimen
BV	Human	Brain	N/A
BW	Human	Blood	Adult PBMC
BX	Human	Ovary	PA-1 Teratocarcinoma
BY	Human	Blood	Adult PBMC/TH1 or 2
BZ	Human	Kidney	19-23wks., M/F pool of 5
C	Human	Blood	Peripheral Blood Mononuclear Cell
CA	Murine	Embryo	Fetal ES cell embryoid bodies
CB	Human	Brain	19-23wks., M/F pool of 5
CC	Human	Brain	N/A
CD	Human	Brain	19-23wks., M/F pool of 5
CE	Human	Blood	Adult lymphocytes+dend. cells
CF	Human	Placenta	26yrs., 1 specimen
CG	Human	Testes	10-61yrs., pool of 11
CH	Human	Kidney	19-23wks., M/F pool of 5
CI	Human	Brain	N/A
CJ	Human	Brain	19-23wks., M/F pool of 5
CK	Human	Testes	10-61yrs., pool of 11
CL	Human	Retina	16-75yrs., pool of 76
CM	Human	Adult Lung	Adult Lung
CN	Human	Brain	19-23wks., M/F pool of 5
CO	Human	Brain	N/A
CP	Human	Salivary Gland	N/A
CQ	Human	Heart	13-73yrs., pool of 3
CR	Human	Testes	10-61yrs., pool of 11
CS	Human	Brain	19-23wks., M/F pool of 5
CT	Human	Brain	N/A
CU	Human	Pineal Gland	N/A
CV	Human	Mammary	Adult Human Mammary
CW	Human	Brain	19-23wks., M/F pool of 5
CY	Human	Pineal Gland	N/A
CZ	Human	Testes	10-61yrs., pool of 11
D	Human	Blood	Peripheral Blood Mononuclear Cell
DA	Human	Placenta	26yrs., 1 specimen
DB	Human	Prostate	Adult Prostate
DC	Human	Pineal Gland	Adult Pineal Gland
DD	Human	Testes	10-61yrs., pool of 11
DE	Human	Testes	Adult NCCIT TeratoCA
DF	Human	Brain	N/A
DG	Human	Placenta	26yrs., 1 specimen
DH	Human	Brain	19-23wks., M/F pool of 5
DI	Human	Testes	10-61yrs., pool of 11
DJ	Human	Placenta	26yrs., 1 specimen
DK	Human	Fetal Kidney2	Fetal Kidney

DL	Human	Brain	N/A
DM	Human	Brain	N/A
DN	Human	Brain	19-23wks., M/F pool of 5
DO	Human	Testes	10-61yrs., pool of 11
DP	Murine	Embryo	Fetal ES cell embryoid bodies
DQ	Human	Placenta	26yrs., 1 specimen
DR	Human	SalivaryGland	N/A
DT	Human	Brain	N/A
DU	Human	Brain	19-23wks., M/F pool of 5
DV	Human	Pineal Gland	Adult Pineal Gland
DW	Human	Brain	N/A
DX	Human	Testes	10-61yrs., pool of 11
DY	Human	Brain	N/A
DZ	Human	Testes	Adult NCCIT TeratoCA
E	Human	Blood	PeripheralBloodMononuclearCell
EA	Human	Brain	19-23wks., M/F pool of 5
EB	Human	Melanoma	Adult Melanoma
EC	Human	Brain	N/A
ED	Human	Placenta	26yrs., 1 specimen
EE	Human	Testes	10-61yrs., pool of 11
EF	Human	Liver	Adult Liver
EG	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
EH	Human	Blood	PeripheralBloodMononuclearCell
EI	Human	Brain	19-23wks., M/F pool of 5
EJ	Human	Placenta	26yrs., 1 specimen
EK	Human	Brain	19-23wks., M/F pool of 5
EL	Human	Testes	10-61yrs., pool of 11
EM	Human	Fetal Kidney2	Fetal Kidney
EN	Human	Brain	19-23wks., M/F pool of 5
EO	Human	Adrenal Gland	Adult Adrenal Gland
EP	Human	Placenta	26yrs., 1 specimen
EQ	Human	Testes	10-61yrs., pool of 11
ER	Human	Brain	19-23wks., M/F pool of 5
ES	Human	Placenta	26yrs., 1 specimen
ET	Human	Testes	10-61yrs., pool of 11
EU	Human	Kidney	Adult Kidney
EV	Human	Stomach	Adult Stomach
EW	Human	Placenta	26yrs., 1 specimen
EX	Human	Testes	10-61yrs., pool of 11
EY	Human	Brain	19-23wks., M/F pool of 5
EZ	Human	Fetal Kidney2	Fetal Kidney
FA	Human	Brain	19-23wks., M/F pool of 5
FB	Human	Placenta	26yrs., 1 specimen
FC	Human	Testes	10-61yrs., pool of 11
FD	Human	SalivaryGland	N/A
FE	Human	Brain	N/A
FF	Human	Testes	Adult NCCIT TeratoCA

FG	Human	Brain	N/A
FH	Human	Brain	19-23wks., M/F pool of 5
FI	Human	Small Intest	Adult Small Intestine
FJ	Human	Lung CA	Adult Lung CA
FK	Human	Kidney	Adult Kidney
FM	Human	Brain	N/A
FN	Human	Brain	19-23wks., M/F pool of 5
FO	Human	Brain	N/A
FP	Human	Placenta	26yrs., 1 specimen
FQ	Human	Testes	10-61yrs., pool of 11
FR	Human	Placenta	26yrs., 1 specimen
FS	Human	Testes	10-61yrs., pool of 11
FT	Chicken	Fetal Lung	Fetal Lung
FU	Chicken	Limb Bud	Fetal St. 23 Limb Bud
FV	Human	Testes	Adult NCCIT TeratoCA
FW	Human	Testes	Adult NCCIT TeratoCA
FX	Human	Brain	19-23wks., M/F pool of 5
FY	Human	Placenta	26yrs., 1 specimen
FZ	Human	Placenta	26yrs., 1 specimen
G	Human	Blood	PeripheralBloodMononuclearCell
GA	Human	Testes	10-61yrs., pool of 11
GB	Human	Placenta	26yrs., 1 specimen
GC	Human	Testes	10-61yrs., pool of 11
GD	Human	Placenta	26yrs., 1 specimen
GE	Human	Brain	N/A
GF	Human	Brain	19-23wks., M/F pool of 5
GG	Human	Fetal Kidney2	Fetal Kidney
GH	Human	Placenta	26yrs., 1 specimen
GI	Human	Retinoblastoma	Adult Retinoblastoma Y79
GJ	Murine	Spleen	Adult Spleen
GK	Human	Fetal Kidney2	Fetal Kidney
GL	Murine	Lymph Node	Adult Lymph Node
GM	Human	Uterus	N/A
GN	Human	Blood	PeripheralBloodMononuclearCell
GO	Human	Adrenal Gland	Adult Adrenal Gland
GP	Human	Ovary	PA-1 Teratocarcinoma
GQ	Human	Pineal Gland	N/A
GR	Human	Pancreas	Adult HPC-3 Ductal AdenoCA
GS	Human	Retina	16-75yrs., pool of 76
GT	Human	Brain	N/A
GU	Human	Fetal Kidney2	Fetal Kidney
GV	Rat	Retina	Newborn Retina
GW	Chicken	Limb Bud	Fetal St.26 Limb Bud
GX	Human	Brain	N/A
GY	Human	Testes	10-61yrs., pool of 11
GZ	Human	Brain	19-23wks., M/F pool of 5
H	Human	Blood	PeripheralBloodMononuclearCell

HA	Human	Testes	Adult NCCIT TeratoCA
HB	Human	Fetal Kidney2	Fetal Kidney
HC	Human	Brain	19-23wks., M/F pool of 5
HD	Human	Brain	N/A
HE	Human	Testes	10-61yrs., pool of 11
HF	Human	Brain	19-23wks., M/F pool of 5
HG	Human	Fetal Kidney2	Fetal Kidney
HH	Human	Brain	N/A
HI	Human	Testes	10-61yrs., pool of 11
HJ	Human	Brain	N/A
HK	Human	Brain	19-23wks., M/F pool of 5
HL	Human	Fetal Kidney2	Fetal Kidney
HM	Human	Testes	Adult NCCIT TeratoCA
HN	Human	Fetal Kidney2	Fetal Kidney
HO	Human	Brain	N/A
HP	Human	Brain	19-23wks., M/F pool of 5
HQ	Human	Testes	10-61yrs., pool of 11
HR	Human	Brain	N/A
HS	Human	Brain	N/A
HT	Human	Brain	19-23wks., M/F pool of 5
HU	Human	Fetal Kidney2	Fetal Kidney
HV	Human	Testes	10-61yrs., pool of 11
HW	Human	Brain	N/A
HX	Human	Brain Hippoca	Adult Brain Hippocampus
HY	Human	Trachea	Adult Trachea
HZ	Human	Brain Thalamus	Adult Brain Thalamus
I	Human	Blood	PeripheralBloodMononuclearCell
IA	Human	Thyroid	Adult Thyroid
IB	Human	Embryonal CA	Fetal NT2-D1
IC	Human	WER1-Rb1 line	Adult Retinoblastoma
ID	Human	Muscle	N/A
IE	Human	Brain	19-23wks., M/F pool of 5
IF	Human	Uterus	N/A
IG	Human	Testes	10-61yrs., pool of 11
IH	Human	Muscle	N/A
II	Human	Brain	N/A
IJ	Human	Blood	PeripheralBloodMononuclearCell
IK	Human	Retinoblastoma	Adult Retinoblastoma Y79
IL	Human	Retina	16-75yrs., pool of 76
IM	Human	Various	Various
IN	Human	Prostate	Adult Prostate
IO	Human	Brain	19-23wks., M/F pool of 5
IP	Human	Fetal Kidney2	Fetal Kidney
IQ	Human	Prostate	Adult Prostate
IR	Human	Brain Hippoca	Adult Brain Hippocampus
IS	Human	Trachea	Adult Trachea
IT	Human	Brain Thalamu	Adult Brain Thalamus

SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: Jacobs, Kenneth
McCoy, John
LaVallie, Edward
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- (ii) TITLE OF INVENTION: SECRETED, EXPRESSED SEQUENCE TAGS
- (iii) NUMBER OF SEQUENCES: 1500
- (iv) CORRESPONDENCE ADDRESS
 - (A) ADDRESSE: Genetics Institute, Inc.
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 - (E) COUNTRY: U.S.A
 - (F) ZIP: 02140
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy Disk
 - (B) COMPUTER: IBM PC Compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
 - (C) CLASSIFICATION:
- (vii) ATTORNEY/AGENT INFORMATION:
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(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: cDNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

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GAATTCGGCC TCCATGGCCT AAGTGTTAA ATTATAAGCT GGTGAAGTGA AATAACACAA      60
ATCAAGCTCA CCAATTTTAA TACTCAGCTG TTGATAAACA AACTGAAGA GTGACATTTA      120
AATTGAATT ATCTTCTTG AAGTAGCATT GCAGCACTTT TGAATGACTT CCAAAAGGCT      180
GATCATAAAA ATCACTTCAA TCATTTTCAA ATTTTACTTT AGCAGCAATG AAGTTATTTG      240

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GTATGACTCA GATGAACCTT CTGCTCTGTC TTGGAGTTAT TATGGTCATT TCATTTTCTG 300
CAACCTGGGA AACCTCGAG 320

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

GAATTCGGCC TTCATGGCCT ACGAGTGGAT CTGGTTGAGA GGAAAGCAGC TAAAAATACA 60
GGAGATGAAA GGGATCATAA CGAACATAAT GAACCATGTT CATTATGGTT CGTGGGGAGG 120
CAGGAAAGCA CAGTATCCAG GGCATAGGCA GAAGAGCTGT CTTTCACGGG AGGAGGGGAA 180
CATATTCTAC TGCAATAAGC AAGGGCGGGG TAAGTACGGA TCGGGTACTT TGGGAACATAT 240
GACGGTAGGG AGTTCAGGAA GTTGCTGCCT GAAGGCATAA AGGTTTTTTT TTTTTTTTTT 300
TTTTTTTGCC AATTGGTCCA GTACCCTCCT TCTGTGGCCC CCATCTCCAG TCTCGAG 357

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

GAATTCCTTA TATAATTTGG ATACCTACTC ATTGTCAGTT GTATGCTTTG CAAATATCTT 60
TCCTGACCCT TACTTACCTT TTCACTCTTA ATGGTATCTT TGATGAATCA AAAATTTTTC 120
TTTTTTTGTT GTTTTTTGAG ACAGAGTCTT AACTCTGTCA CCCAGGCTGG AGTGCAGTGC 180
ATGAACATGG CTCACTGCAG CCTCAACTTC TTGACTCAA GCAATCCTCC TGCCTCAGAA 240
CCTCTCGAG 249

(2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

GAATTCGGCC TTCATGGCCT AGACCTGCCT CTAGCTCCTT TCCTTCTACT CTCCTGCTCA 60
GACCATTAGT AGGTACTTTG TTAAATAAAA AACTAGATTA ACATCAATAT TACTCCAATT 120
TGGTATCTTT TACACTATGT ATTATACCTA CTTTCTTTT ATTTCATTTA CAAATAGTTT 180
AAATTACTTT ATCAACCAGC TGTATTGTTT CCCTCTTGTA AAAGTACCAT CAAGTGGGGA 240
AAATGTATGT GGCAGTCTCG AG 262

(2) INFORMATION FOR SEQ ID NO:5:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

```

GAATTCGGCC TTCATGGCCT AATAACTTAC CCAGTCACGA ATATTTCTTC ATAGCAGCAT      60
CAGAGTGGAC TAATACGATT ATAATTATCA TCACCTTTTG ACTGACCAAT TGATTTACAG      120
TATTGAGTTC AATCTGTTT TTTAAAAAAT ATCTTCTAAA TATCAGGTGC TGTATTAGAT      180
GTGGGTACA AAAATGTATT TTCATTACT CACTAATTTA CTTAAATTT ATTTATTGAG      240
GTACCTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:6:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

```

GAATTCGGCC TTCATGGCCT AGGTGCTGGA AGTAAGCTGT GTGAACAAAT GAGACGATTC      60
CCCTTTCTAA TGAGTTTATA TGCAATGTGG TATCTTTACC GATACATGCT CTGTCAGAAA      120
GAAGCAGCCC ACTTCTGTCC AATAGCCAAT CCGGCTTCAG GAGCAGCAGG AGAGGCTTCG      180
GGAACGGGAG AAGAGGCTTC AGCAGCTGGC CGAGCCACAG AGCGACTTGG AGGAGCTGCA      240
CGAGAACAAAG AGCGCACTGC AGTTGGAGAG CTCGAG                                     276

```

(2) INFORMATION FOR SEQ ID NO:7:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

```

GAATTCGGCC TTCATGGCCT ACTCATCCA AAATAAAAAA AAAAATTTCC CATGATCTTA      60
TCTAGCTTCT CTAGCAGTAC TTGTATGATT TCACCTTTCT TTCTTTATTC TTTTCTTCCA      120
TATTTTITTT TTTTGAGACA GGGTCTCACT CTATTGTCCA GGCTAGAGTG CAGTAGTTTG      180
ATCATGACTC ACTCTAACCT GGACCTCCGG GGCCTAAGTA ATCTTCCCAC CTCAGCCTCT      240
CAAGTAGCTG GGACTACAGG GATGTACCAC CATGCCTGGC TAAG                                     284

```

(2) INFORMATION FOR SEQ ID NO:8:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

```

GTTGAATTCT AGACCTGCCT CGAGGACGCC AGGGAAGTGA GTTGAAAATC TGAAAATGCG      60
GCCATGGACT GGTTCCTGGC GTTGGATTAT GCTCATTCTT TTTGCCTGGG GGACCTTGCT      120
GTTTATATA GGTGGTCACT TGGTACGAGA TAATGACCAT CCTGATCACT CTAGCCGAGA      180
ACTGTCCAAG ATTCTGGCAA AGCTTGAACG CTTAAAACAG CAGAATGAAG ACTTGAGGCG      240
AATGGCCGAA TCTCTCCGGA TACCAGAAGG CCCTATTGAT CAGGGGCCAG CTATAGGAAG      300
AGTGCGCGTT TTAGAAGAGC AGCTTGTAA GGCCAAGAA CAGATTGAAA ATTACAAGAA      360
ACAGACCAGA AATGGTCTGG GGAAGGATCT CGAG                                     394

```

(2) INFORMATION FOR SEQ ID NO:9:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

```

GCTGTGATGA AAATGCTTTA TGCTTCAACA CTGTTGGAGG ACACAACTGT GTTGAAGC      60
CGGGCTATAC AGGGAATGGA ACGACATGCA AAGCATTTTG CAAAGATGGC TGTAGGAATG      120
GAGGAGCCTG TATTGCCGCT AATGTGTGTG CCTGCCACA AGGCTTCACT GGACCCAGCT      180
GTGAAACGGA CATTGATGAA TGCTCTGATG GTTTTGTTC AATGTGACAGT CGTGCTAATT      240
GCATTACCT GCCTGGATGG TACCACTGTG AGTGCAGAGA TGGCTACCAT GACAAATGGGA      300
TGTTTTACCC AAGTGGAGAA TCGTGTGAAG ATATTGATGA GTGTGGGACC ACTCGAG      357

```

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

```

GAATTCGGCC TTCATGGCCT ATTTCCGATC TATGTATCTG TACTCATACA GCCTCATCGG      60
GCTAAACAGC CTTCTTTTCA GAACAGTAGA TCACTCAACT GGGTTTTCAA GTGACTGTTT      120
ACCTTTC AAG GCTGGCTTTA TAGGTCTTGC CTCACGTGAT CCAGCAATCC AAACCTTACC      180
CTATCCCAGT CAGGACTGCA CACCTCATAT TGAAAGACAT ACCTTAGAAC CAGACTCCCC      240
AAACCTTACA AATATCCCAC CCTTGACTCC CGTTCTCGAG                                     280

```

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

GAATTCTAGA	CCTGCCTCGA	GC GCCACACA	GTGACTGCCG	GGTAAAGTTG	TGGAATTACG	60
TCCCTGGACT	CACCCCTGCG	CTTCCTCGCC	GAGTCCTGGC	CATAAAGGGC	CGCGCCACCA	120
CCCTGCCCTG	ACCCTCCCCA	ACTCTCCCTG	TCTCCTCTTT	CATTCTTCCC	CTCTTTCCTT	180
TTCCCTCTCT	TTCCCCACTT	CGATATGAGC	TGCTTCTTAA	CGGTATGAGA	TTATTTNACT	240
CCTTCTTCTT	CCTTTCCTT	CCTGTCTGCG	CTGGCCTAGA	GAGGTGCCCT	GCCTGTCCCT	300
CCTGCACCCA	CCGTCTTTT	CCAAGCATGA	ACAGTGGGAC	AGGCCCCAGG	AGATGGGTGC	360
CAGGGAGCAG	AAGGGGGAGC	CTTCAGGCCT	GGACAAAACG	AAACACCCCC	CCAAAAAAG	420
NAAACCCACG	ACTCGAG					437

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

GTTCCTCTA	AGTAGATCTT	CCTTCCCAT	TAAACTAGGT	TTTCTACTGC	AAGATATTTT	60
GTGCATTGCT	GTTTTAAACC	CTTTTAAACAG	CGAATCATAG	CAGTCTAAGA	AGTCTTCTGA	120
ACCATCTGG	ACTCTTGGTG	TGATTTTAA	TTGTGTCTAC	AAGTTCTCTG	ACATTCTTCC	180
CACCAAGAGG	TAGAGTCTGT	TTCCCTCCC	TTTGAACCTA	GGTAGGCCTT	TGTACTGCG	240
TTGATGAATA	CAATGAGACT	CGAG				264

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

GATTTTITAC	CCAAAGCTCT	GGAATTGTAC	ATTATTTTT	TAAACTCAA	AGAGGGAAAG	60
AGCCTTGAT	CATATGTGAA	CATTGTATCA	TAGGTAATGT	TGTACAGACC	CTTTTATACA	120
GTGATCTGTC	TTGTTCTGCG	AGCAAAAATC	CTCTATGGAC	ATAGGAGGTG	CTGTGTCCCA	180
TGCCCTCTTG	CCCTGACAGT	GTCCCATGGG	CCCCCTTCTG	CTCCCTGCCC	CCTCCCTGCT	240
ACTGCTGATG	CACTCCCCC	CCTCGAG				267

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

```

GAATTCGGCC TTCATGGCCT ATTTTATT TGTGTTGTT TGTGTTGTT GGATGGGGTT      60
TTGCCGTGTT GCCCAGGCTG GTTTCGAATT TTTGGGCTTA TGCAATCCAC CCACCTTGGC      120
CTCCCAAAGT GCAGGGATTA CAGGCATGAG CCATCTTGCT GGGCCACCTT TTTCTTCTCT      180
TTTAACAAAT TCAGCAATTT TTCAGTCCCA GAAATCTGTA AATACATTTT TTGTGGAAAA      240
ATACAATGGG AATGGCATCA AAAGATGGTT TCTATTAGGA ATGGGAACAG GTAACAGTTT      300
TCCCTGCCAC CTCAACAATC TCGAG                                           325

```

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

```

GGGCTGGCAG GCGGGCCAAA GGTAAATGAAG CAAAGAGAGA GGGAAAAGAC GTGTGAAAAT      60
TGCAGAGGGG GTGACCGAGG GAAACACGTG AGCGTGATAA TGACAGAAAA ACCACGGGAG      120
GAGCAAACCT GGGCAGGGGG TGGGAAACCC GGGCCGTTTC CAGGGAGCAC AGGCAGACTC      180
AGAGGTAACA CTCAAAAGCA ACAACAGAAG CAAGGAGGAA GTGGGAAAAAT ATTTTAAATG      240
TGCTACAACG AAACAGCTGC CTGAATTCTA TATACCTCTT GAAAATAATC TGCACATAAA      300
ATGGGAAAGC TTCACCGCAG CAGACCCAC TCGAG                                           335

```

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

```

GAATTCGGCC TTCATGGCCT ATGCTTCTTC CACGCACCAC CACCACCACC ACCACCATCA      60
TGGCCATAGC CACGGTGGCC TGGGGGTGCT GCCTGATGGG CAGTCCAAGC TCCAGGCCCT      120
GCATGCCAG TATTGCCAAG GACCGGGCCC TGCCCCGCCA CCTACCTCC CACCCAGCA      180
GCCCTCTCTT CCCCCACCTC CCCAGCAGCC CCCACCTTG CCCACCTGG GCTCCATTCC      240
ACCGCTCCC GCCTCAGCCC CACCTGTGGG GCCACATGCG CACTTCCAGC CCCATGGCCC      300
AGTCCCAGG CCCCACACT ATACCTTGGG CCGGCCAGGC AGGGCACCCA GACGGGGGGC      360
TGGAGGACAC CCTCAGTTTG CTCCACATGG CCGCCACCCC CTGCACCAGC CCACATCCCC      420
ACTGCCCCTG TACAGTCTTG CCCCCAGCA CCCTCCAGCC CACAAACAGG GCCCTAAGCA      480
CTTCATCTTC AGCCACCACC CATCTCGAG                                           509

```

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

```

GAATTCGGCC TTCATGGCCT AAAGATGGCG GAGAACAGCG GTCGCGCCGG CAAGAGCAGC      60
GGGAGCGGCG CGGGGAAGGG GCGGTGTCC GCAGAGCAGG TGATTGCTGG CTTCAACCGC      120
CTTCGGCAGG AACAGCGAGG CCTGGCATCC AAAGCAGCTG AGTTGGAGAT GGAGTTGAAT      180
GAGCACAGCC TAGTGATCGA TACACTGAAG GAGGTAGATG AAATCGTAA GTGCTACCGC      240
ATGGTTGGAG GAGTGCTGGT GGAGCGAACT GTCAAAGAGG TGCTGCCCCG TTTGGAGAAC      300
AACAAGGAGC AGATACAGAA GATCATTGAG AACTGACAC AAGCAACTCG AG              352

```

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 207 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

```

GAATTCGGCC AAAGAGGCCT AGCTAGGTTT TGAAGCTTCT GAGTTCTGCA GCCTCACCTC      60
TGAGAAAACC TCTTTGCCAC CAATACCATG AAGCTCTGCG TGACTGTCTT GTCTCTCTCTC      120
GTGCTAGTAG CTGCCTTCTG CTCTCTAGCA CTCTCAGCAC CAATGGGCTC AGTCCCCCCC      180
CCCGTACACG CCTCGAGGCA GGTCCGAG                                207

```

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

```

GAATTCGGCC TTCATGGCCT AGGCGGGACT AACACAGGGT TGTATCTTTT TCCTTTTGCC      60
AAGAAAGAAC ATTAATATGT ACTACCAGCA TCTGCCATCA CTAGCATTTT ATAAAAAGAG      120
GTTCTGTAG CAACAGAGTA GAAACTGTAG GAAAGCATCT CAGAACAAA CTAAGTTGAA      180
TAAATTCACC TAATAAAAAA GCCTTGGTCT AGGATTCCTT TTCTTCATCA AAAGCTGCAA      240
GAGAAAGCCA CTGCTTACCT GATGCCGATT TACTGGTCAT TGGGGTGGGC AGTTTGGTT      300
CTCGAG                                306

```

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

```

GGTCTCACTT GTCTATCCT GTCGCCAGG CTGGAATGCA GTGGTATGAT CTCAGCTCAC      60
TGCAACCTCA GCCTCCTGGG TTCAAGTGAT TATCCTGCCT CAGCCTCCAA GTANCTGGGA      120
CTATAAGCAC ACATCACCAC ACCCAGCCAA TTTTGTGAA TTTTAAATAG GGTTCCTACTA      180
TGTTGGCCAG GCTGGTTGAA CTCCTATCCT CAAGCGATCC ACCCACCTCG GCCTCCCGAA      240

```


GTGCTGGGAT TACCTGAGCC ACCGTGCCCCA GCCCATTTC AAGTACTTTT TATTTAACCC 300
 TATCGTGCTA GGGCACCATG CAATATACAG CTATTTTCATT TTCCTTTTGT CTCTGTTTCT 360
 TAGGTGTCT CGAG 374

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTCTTTT GGATTAGATT ATATAAAATC 60
 AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT 120
 GTCCTTCACA CTAGCTACAT GATTTATAGT CTTGCTCCCC AATATGTTAT GTATGGAAGC 180
 CAAAATTACT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCCTT 240
 TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTACTGT TACCCGGACG 300
 CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:22:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:22:

GGTAGAGATA ACAAACAGG ATACCAAAGT TGAGCTGGAG ACTTACAAGC AAATCTGGCA 60
 AGGTCTGGAT GAAATGTACA GTGATGTGTG GAAGCAGCTA AAAGAGGAGA AGAAAGTCCG 120
 GTTGGAACTG GAAAAGAAG TGGAGTTACA AATTGGAATG AAAACCGAAA TGGAAATTGC 180
 AATGAAGTTA CTGGAAAAGG ACACCCACGA GAAGCAGGAC ACCTAGTTG CCCTCCGCCA 240
 GCAGCTGGAA GAAGTCAAAG CGATTAATTT ACAGATGTTT CACAAAGCTC AGAATGCAGA 300
 GAGCAGTTG CAGCAGAAGA ATGAAGCCAT CACGCTCGAG 340

(2) INFORMATION FOR SEQ ID NO:23:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:23:

GAATTCGGCC AAAGAGGCCT AGATTTTAAA TTTGTTTGAT ACCTGCTGTG TATTCCTTGC 60
 ATACCCAGCA CATTGTTGCC CATATTGTTG ACATGTAGTA TGTATTTATT ACAATTATAT 120
 GATTAATGAA ATGTATCTTA TTTTTCAT GTATAGCATG TACAGTCACA CTCGAG 176

(2) INFORMATION FOR SEQ ID NO:24:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:24:

```

GAATTCGGCC AAAGAGGCCT ATTCTTTGTC TTTGACAT GTTCTTTGAG TCTTAGTATC      60
TGTAACGTGG CGCTACTCTC TCTATCATGG GGGGGCATGT TTTGACATTA AATTGACTTT      120
TAAGAAAAAC ATGTCATAA CCTGAAGCTC AGCCACACAG TGACTTTTAA GGTTTTATTT      180
AGACTTTACT GTTGTCTCA TGAGAGTAGG TACAGACTGC ATAAGGTTTA GAATCCCAGC      240
ATATGTCTGA AACGACGGGA CTTTCACTGT GATTTCACC AGAGAAATTA TAGCAGAGTG      300
GCTGAGCATG TGCTCTGAGG CCAGGCCCCA GCTCTGCTGC TGACGAGCTG TGTGGTCTTG      360
GGCAGAGTGG TCTCCGAGTT CCAGTCCCTC CTCTGTAAAA TGGGCTTACT CGAG          414

```

(2) INFORMATION FOR SEQ ID NO:25:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:25:

```

GAATTCGGCC AAAGAGGCCT AAACATATAC CTAGTCTATA CTCTCTCTTA TCTCTGAACA      60
CTTTTCATCT GGAGCTATTA ATGCCCTCTA GCCTTTATTA TAATTATCAC ATATAATTAT      120
GCCTTTTCTC CTCAAAATTA TCTGTTGGAG TCATCTTATA GTAGAGTCTT TACAGAACAC      180
AAAGCATTCA ATCACTTTAT TTCAGACACC AACCTTGTTT TTGATGAACA TATGTTAGTC      240
TTAAGCCATC TAAAGTAATG CTAATGTGGG ATCTTATGGA AGACTACTGG TAATACAGGA      300
AAAAAAGTGG CAAAGAAATC TGACACGTTT GGCAATTATT CCTGAGGCTC TGACCTCTCA      360
ATTGTTGAGT GTTGGAGGTC ACAGTAAACA AACCATATAA AGATCATGTT GAAAGTCAAC      420
ATTATTAATA TACCATACTT GAAGGATATG TGGTTATTGT CTCACGTGTC CATGTGAAGA      480
GACCACCGTC CCTCGAG          497

```

(2) INFORMATION FOR SEQ ID NO:26:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:26:

```

GAATTCGGCC AAAGAGGCCT AGTTTTTGAT GAATTGCTGT TATTTACTTA TAACTAGAGT      60
TTGAATGTTT ATTGGGAAAA CTTAATCATG ATCATCTACT GGTGGCTCGA G          111

```

(2) INFORMATION FOR SEQ ID NO:27:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:27:

```
GAATTCGGCC AAAGAGGCCT ATGCAATTCT GACCAGGAAG CTCCTCTTTA ATTGGAATT      60
CTTAGAAAGG TATGGAGCAA AGGAGATCCC AGCAAACATT CCGGCATCTA CTGCTCTTGG      120
GTTTTTCTG TGTTGGTTT TTTGTTTGG TTTGTTTAT GAGATGGAGT CTCACTCTGT      180
CGCCAGGCT GGAGTGCAGT GCGCAATCT CAGCTCACTG CAATCTCCAC CTCCAGAGTT      240
CAAGTGAATA TCCTGCCTCA GCCTCTCAA CAGCTGGAAT TACAGGTATA CACCACCACA      300
CCGAGCTCGA G                                     311
```

(2) INFORMATION FOR SEQ ID NO:28:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 597 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:28:

```
GAATTCGGCC AAAGAGGCCT AAGTGCAGTG GTGCGATTAT AGCTCACTGT AGCCTCAGAA      60
TCCTGGGCTC AAGCTGTCTT CCCACTTAGC CTCCCAAAGT GCTGGGACTA CAGGCGTGTG      120
CCACGGGGCC CAGCCATTTT TTCGAATATT TTCATCTGTC AGTTGTTTGA ATCCACAGAT      180
GCAGAACCCA TTTCTAATGG AGGGCTGACT ATACCTTTCT GATGACCTAA ATATTGTGT      240
CCACTATTGG GACACTCCTT TCTTAGTGTC AAGGTTTGTG AGAAATTGAG GGCTGTTTGA      300
TGGGCAAAGA TTTATTATT TATTTACTGG CTTATCTACA ATTGAGACAG GGTCTCACTA      360
TGTTTCTCAG GCTAGTTCTA ACTCTGGGC TGAAGCAGTC CTCCTATCTC AGCCTCCAG      420
AGTGCTGGGA TTACAGGTGT GACACACCAT ACCCGGCAGA GCAAAGAGTT AAGAGTACAA      480
GACATTGTAT CATCTTGAGG AGTATTACT TCAGACTGAA ACACCACATG AAATCTAGA      540
GTCCAACAGA AAGTGAATA ATTTTGTCT TTTCCCTTCT TCCGCTACAT CCTCGAG      597
```

(2) INFORMATION FOR SEQ ID NO:29:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 506 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:29:

```
GAATTCGGCC AAAGAGGCCT AATTCTAGAC ATGCTCAGCT TTCTGGATAC GCGGACTTTG      60
TTGCTGCTTG CAGTAACCTT ATGCCTAGCA ACATGCCAAT CTTTACAAGA GGAAACTGTA      120
AGAAAGGGCC CAGCCGGAGA TAGAGGACCA CGTGAGAGAA GGGGTCCACC AGGCCCCCCA      180
GGCAGAGATG GTGAAGATGG TCCCACAGGC CCTCCTGGTC CACCTGGTCC TCCTGGCCCC      240
CTGGTCTCGG TGGGAACCTT GCTGCTCAGT ATGATGGAAA AGGAGTTGGA CTGGCCCTG      300
GACCAATGGG CTTAATGGGA CCTAGAGGCC CACCTGGTGC AGCTGGAGCC CCAGGCCCTC      360
AAGGTTTCCA AGGACCTGCT GGTGAGCCTG GTGAACCTGG TCAAACCTGG CCTGCAGGTG      420
GTCGTGGTCC AGCTGGCCCT CCTGGCAAGG CTGGTGAAGA TGGTCACCCT GGAAAACCCG      480
GACGACCTGG TGAGAGAGGC CTCGAG                                     506
```

(2) INFORMATION FOR SEQ ID NO:30:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:30:

```

GAATTCGGCC AAAGAGGCCT AGTCTGTGGT CATTTC AAC TCTCATTAT AGGATTCTAA      60
AAGGGCACTA CATTACTCCA CTCCCTTATC TAAAATAAAT TTAAAATTCA TCGGAATTG      120
TCCAGTCCTC CATCACTGGA AAATGTACAG ATTCCTTCTC TGGAAATATC TAAAGAAAAG      180
TACAGCTAAT GTTCCCCCAT TTCGTGTTGT TTTGTTGCTG CTTTAACTAT GAATCATCT      240
GGCCGGGCGC AGTGACCAAG CCGCCGGGAG CTGGGGAGAG ACGCACCGGG GCGGCGACTG      300
GGCCAGGAGA CCAGAACACT CGAG                                         324

```

(2) INFORMATION FOR SEQ ID NO:31:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 245 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:31:

```

GAATTCGGCC AAAGAGGCCT AGGAGCAGAT TCCTCATGGT GCTTGTATTAT TATATATATT      60
TAATCCTGCT TGACACTTTA CCAAGGGAG ATGGTCCCTT TTATCAGTTG AATGTTAGCA      120
GCGTTATTTC AGAGTGTGGT GACTGGTTAG AGAACTCAT GTACTCAACC AGCCACAGTT      180
TCAAACAAAA TTTTATGTG CAAAGGACAG CAACCTTCTT GTATGTTAAA CCACCAGTAC      240
TCGAG                                         245

```

(2) INFORMATION FOR SEQ ID NO:32:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:32:

```

GAATTCGGCC AAAGAGGCCT AGGTGCTTTG GTTTTGTCTT TTTTAGTCAT CCCCATGAGA      60
ATAATAAACT CCATGAGGGC AGCAACTTGG CTGGCCTGTG TGCCAGTGCT GGGGACATCA      120
CTGAGAAATG AAGGCCCAT TGGCAGGCTA TTTTGTAGCA AGATTCCTGA GGCCCAATCG      180
TTGGGTGATG AGATGGACCC GAGGTATTTC ACTCCAGCTC TCGAG                                         225

```

(2) INFORMATION FOR SEQ ID NO:33:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:33:

```
GCCAAAGAGG CCTAGAGAGC TCTGGGGGGC AACCTGGAGG TCTGAAAAGA GGAGCCAGAG      60
AAGGTGGTAC CAGGCTTCCT GGTGAGAACG GGCTGGAGC TCCTTCCTT CCCCTGGCC      120
TGAGAGGTG CTTTAAAGTC TTCCACCCCT TGTTCATCT GCCTGCCAAC CCATCGGAAA      180
GGAATCCACA TCATATTGGA GATGACCCA TCAACCCAG GGCTCCAGCA CTACCAAGTT      240
GGAATCCAC GCCCGGAGT GGGGTAGAGG AAGACGAGAC AGGACGAGGC AGAAAAGCAC      300
ATTTTAAAA CCAGACAAGA TGGCTAGGCC ATCACCACC AACGGACTTA CCTTACATTT      360
TTGTAGGTAA TTCCCCCAA ATCTTGATTT TTTTTCCT CAATTATCCT TAAAAAATA      420
AGAAAACACA TTCCAAACCC ACTCGAG      447
```

(2) INFORMATION FOR SEQ ID NO:34:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 402 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:34:

```
GCGATTGAAT TCTAGACCAT GCCTGCTCTG GGCCAGCTC TTCTCCAGGC TCTCTGGGC      60
GGGTGGGTCC TCACCTCCA GCCCTTCCA CCAACTGCAT TCACTCCAA TGGCAGTAT      120
CTGCAGCACC TGGCAAGGA CCCACCTCA GGCACCTCT ACCTGGGGG TACCAACTTC      180
CTGTTCAGC TGAGCCCTGG GCTGCAGTG GAGGCCACAG TGTCACCGG CCCTGTGCTA      240
GACAGCAGGG ACTGCCTGCC ACCTGTGATG CCTGATGAGT GCGCCAGGC CCAGCCTACC      300
AACAAACCGA ATCAGCTGCT CTTGGTGAGC CCAGGGGCC TGGTGGTATG CGGGAGCGTG      360
CACCAGGGG TCTGTGAACA GCGCGCCTG GGCAGCTCG AG      402
```

(2) INFORMATION FOR SEQ ID NO:35:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 307 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:35:

```
GAATTCGGCC AAAGAGGCCT AGTGAAGAT TTGGGTACTG TCTTAAATAA ATCAATCAAT      60
CGACTCTTAT TTCAAGGAGA AAGTTCTATG TTATATGTTG AAGGTGAACA GATCATATTT      120
AGAGGATATA ACAATTAGAA ATCTAGAAAA TAATTATCAC TTTTATAAAA TTTTGTAGCA      180
ACTGTACAAA TAATTACATA AAACATCAAT TAATTATGCT TAAAAATCAC TAATGTTTAT      240
AATATATAAT CACTATTTGT AATCAAAAGT TTAATTTTAT GCCAAAAAAT AAAAAATGCT      300
TACTCGA      307
```

(2) INFORMATION FOR SEQ ID NO:36:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 324 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:36:

GAATTCGGCC	AAAGAGGCCT	ACTTCCATAA	CCGTGCTTTT	GACGTTAAAA	ATTTTAAATT	60
CAGCCTTTTG	GAGAACACTA	AGTATCTTAG	TGTGTTTTTA	CTTACTATAA	TAATATTATT	120
GACCTAGTGT	AATATTACTG	CCATATGGAC	CTCAAGGGTA	CTTTTCTGAT	AAATTTCTGT	180
TATGGTTTCA	TAATTAAACA	AAAGGATAAT	ATACAGAGTT	GTGGAGTTTT	TTTGGTTTTG	240
TTTTGTTTTG	AGATAGCCTG	GGCAACGAGT	GAAACTCTGT	CACACACACA	CACACACACA	300
CACAGACACA	CACCAATCT	CGAG				324

(2) INFORMATION FOR SEQ ID NO:37:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 426 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:37:

GAATTCGGCT	TCATGGCCTA	CAAGAAGATG	AAGAAGATTG	TGGATGCCCT	GATCAAGTAC	60
AAGGACAGCA	GTGGACGTCA	GCTCAGCGAG	GTCTTCATCC	AGCTGCCCTC	GCGAAAGGAG	120
CTGCCCCGAGT	ACTACGAGCT	CATCCGCAAG	CCCCTGGACT	TCAAGAAGAT	AAAGGAGCGC	180
ATTCGCAACC	ACAAGTACCG	CAGCCTCAAC	GACCTAGAGA	AGGACGTCAT	GCTCCTGTGC	240
CAGAACGCAC	AGACCTTCAA	CCTGGAGGGC	TCCCTGATCT	ATGAAGACTC	CATCGTCTTG	300
CAGTCGGTCT	TCACCAGCGT	GCGGCAGAAA	ATCGAGAAGG	AGGATGACAG	TGAAGGCGAG	360
GAGAGTGAGG	AGGAGGAAGA	GGGCGAGGAG	GAAGGCTCCG	AATCCGAATC	TCGGTCCAGT	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:38:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 482 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:38:

GAATTCGGCC	TTCATGGCCA	ACACATAATC	CACGCTCATC	TGCAAAGCG	CTATTTTCAGG	60
CACATCATTG	GAATACAGGA	AGTAGCCCTG	CACCTGCCAG	TGAGCTCGCC	ATTCACTGAT	120
TGGAAGAGTG	ACCTGGCATC	TTGGAAATCA	TTGTGTGTCT	TCAGGAGAAT	GTGCAGTGTC	180
TTGTAACAAC	TAATATAAT	GCAAATTAGG	GCTACATTGT	AATCTGCTTT	GTTAATGAAA	240
ATGATAAAAC	AGAATATTGA	CAAGCTAGGA	CACCTGTGGT	ATCTTTAATT	GTATCTCCTT	300
CAGAAGTTTG	CTTCTTATGG	TATAATAAAG	TATGGAAGAA	TATTGAGTAT	ATGTTTACTC	360
TGGGCCTGGG	AGAACTTAAC	TTTCTAGAGC	AGTTGTGTGA	CTTGTGTGCA	ATGGGGAGAG	420
GTACCATGAT	GAACTCACA	GGGAGCCACT	GTTCACTGAC	ACTTGGAAGG	CCCTGCCTCG	480
AG						482

(2) INFORMATION FOR SEQ ID NO:39:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:39:

```

GTGTTTGCCC ACACCCTCCT TGAATTTAAC TGCCACAATC TATCCGAGAG TGTGTTTGT      60
TCTGTTTCTT GTTTTTCCTT AGCGTTTGCG TTGCTTCCTC TGAAGCCAGA GGGTGAAAGG      120
CCCTAGCAAA GTTAGTTATC AGTCAACTGA TGATAACTGT GATCCTTAAA GATGAATTC      180
CAGCCTGAGG TGACACACAG AGGTTTCAGCA GACGCTCAG GATCTGTCAC ATGTCATGTT      240
GCTTGGTGTG AAGATGGAAG AACAAAGTCC ACATCAGTTT CTGCTCCTTC AAACAGTGTG      300
TCGATATGAA ACATTGAGAT TTGGCAGAAA CATGTGCCTA GTTTGCAGCA CCAAATACTC      360
GAG

```

(2) INFORMATION FOR SEQ ID NO:40:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:40:

```

GAATTCGGCC TTCATGGCCT AAAGGGATAT TCACTCAAAT CCCTAAGTAT TTCAGAAACA      60
GCCTGAGAGC AAGTCCTTGG CTTCGCTTTC TAGTTTAAAA AGGCTTTTAA CTGTTTAGTC      120
TGAGATTCCC CTAAAGTTC CAGGAAAGCA AACTCAAAAA GAGCCTAGGT GGTCAATCAT      180
TATTTTGTCT GCGTTTATAT AAATAATCAG GCCAAGTTAA TGAGACTAAA CTTATTTTGC      240
AAGCAAATCA GTCCTTGCTT ATTTTGGTA GGAATGGGGG TAAATGGAGA GAGAGAAATT      300
ATGTTTCAGA AGAAACTAT AGCACACCAA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:41:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:41:

```

GAATTCGGCC TTCATGGCCT AGTGGGAAAC ATTATTTCAA GACATTAGGG ATAAGAATGC      60
CAGTTGCTAC TGAGTTGGTT ATTGTTTCAA GGATTATCA ATACATAGAG CAAATAATTA      120
TGTTTGTCTT TGTCTTATTT TTATTTCTTT ACTTTAGAAA CAGTACAGCT ACTTACAAAT      180
CAAGTTTAGA ACTCTCAGGT TATCTTAAAT CTGAAGCTTC TACCTTCCTA AGAACAAAC      240
ACCGGCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:42:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:42:

GTTCAACCAG	TTCAAATACT	TTTTCAACCT	CTATTTCTTA	CTTCTTGCCT	GCTCTCAGTT	60
TGTTCCCGAA	ATGAGACTTG	GTGCACTCTA	TACCTACTGG	GTTCCTCTGG	GCTTCGTGCT	120
GGCCGTCAC	GTCTCCGTG	AGGCGGTGGA	GSAGATCCGA	TGCTACGTGC	GGGACAAGGA	180
AGTCAACTCC	CAGGTCTACA	GCCGGCTCAC	AGCACGAGGC	ACAGTGAAGG	TGAAGAGTTC	240
TAACATCCAA	GTTGGAGCCC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:43:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 437 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:43:

GAATTCGGCC	TTCATGGCCT	AAGATGATTG	TGCTATTATT	GTTTGCTTG	CTCTGGATGG	60
TGGAAGGAGT	CTTTCCCGAG	CTTCACTACA	CGGTACAGGA	GGAGCAGGAA	CATGGCACTT	120
TCGTGGGGAA	TATCGCTGAA	GATCTGGGTC	TGGACATTAC	AAAACCTTCG	GCTCGCGGGT	180
TTCAGACGGT	GCCCAACTCA	AGGACCCCTT	ACTTAGACCT	CAACCTGGAG	ACAGGGGTGC	240
TGTACGTGAA	CGAGAAAATA	GACCGCGAAC	AAATCTGCAA	ACAGAGCCCC	TCCTGTGTCC	300
TGCACCTGGA	GGTCTTTCTG	GAGAACCCCC	TGGAGCTGTT	CCAGGTGGAG	ATCGAGGTGC	360
TGGACATTAA	TGACAACCCC	CCCTCTTTCC	CGGAGCCAGA	CCTGACGGTG	GAAATCTCTG	420
AGGGCGCCAC	ACTCGAG					437

(2) INFORMATION FOR SEQ ID NO:44:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 242 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:44:

GAATTCGGCC	TTCATGGCCT	AGTACCTTAA	AACTTTGGA	AATAATAATA	ATAATAATAA	60
ACAAAAAATA	ATCCCAAACC	CCGTAAGTTT	AACCTTCTAT	GCTTTGGCTG	TTTTTGGTTT	120
ATTTTTTGT	TTTTAGAAGG	GGTCTCGCTC	TGTCGCCAG	AATGGAGTGC	AGTGGCTTAA	180
TCAGGGCTCA	TTGCAGCCTC	GACCTCCTTG	GTTGCGGCGA	TCCTCCTCCC	TCCACACTCG	240
AG						242

(2) INFORMATION FOR SEQ ID NO:45:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 264 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:45:

```

AATTAAATTA AATTAAAATC TTTGTTACAA ACTATGAAAA TGAATATAAG TAAATTTTCAT      60
ATCATTTCCTT TTCTAGATTT ATTATCTAGG ATAGATTTGG ATGAACTAAT GAAAAAAGAT      120
GAACCGCTC TTGATTTTCC TGATACCTTG GAAGGATTTG AATATGCTTT TAATGAAAAG      180
GGACAGTTAA GACACATAAA AACTGGGGAA CCATTGTGTT TTAACACCG GGAAGATTTA      240
CACAGATGGA ACCAGAAAGCT CGAG                                         264

```

(2) INFORMATION FOR SEQ ID NO:46:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:46:

```

GAATTCGGCC TTCATGGCCT AACCTGGAGA AACTATTTAA GTTGGATGAA GCAAGTGCCC      60
AGCTCCTTGC TTATAAGGAA AAAGGCCATT CTCAGAGTTC ACAATTTTCC TCTGATCAAG      120
AAATAGCTCA TCTGCTGCCT GAAAATGTGA GTGCGCTCCC AGCTACGGTG GCAGTTGCTT      180
CTCCACATAC CACCTCGGCT ACTCCAAAGC CCGCCACCCT TCTACCCACC AATGCTTCAG      240
TGACACCTTC TGGGACTTCC CAGCCACAGC TGGCCACCAC AGCTCCACCT GTAACCACTG      300
TCACTTCTCA GCCTCCCACG ACCCTCATTT CTACAGTTT TACACGGGCT GCGGCTACAC      360
TCCAAGCAAT GGCTACAACA GCAGTTCTGA CTACCACCTT TCAGGCACCA TAGTGACTCG      420
AG                                         422

```

(2) INFORMATION FOR SEQ ID NO:47:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:47:

```

GAATTCGGCC TTCATGGCCT ACCGAAGGGC ATCCCATCGG TTGGGTAGGT CATGGTTAAA      60
AAATCATCTC CTTTGGTTGC ATATTTAATT ATTTTCCACT ATTTTTCCT CACACAAAAT      120
GATTTTGCCC GGTACCCTTT TTGGGGGTGC ACAGTCCATG AGATGAATAT TGAATGGGGA      180
GACCTGGGTT CTAGTCTCGC ATTTACCACT CAGGTTACAA TCGPCCCTTG AGCAAGTCAC      240
TTCACCTCCC AGCGCTCAG TTTCCTCATT GTAAGATAGG AAAAGCCTTG TCATTTTAA      300
AATTTTATTT TTGCAATA CCTCATGGCG AACTCGAG                                         338

```

(2) INFORMATION FOR SEQ ID NO:48:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:48:

GAATTCGGCC TTCATGGCCT ACTATGCTCT GCACGTGGGT CATTCTTAC TGGTTTCTAA	60
AAGCCTTTCA TTTCTGCCT GTACACAATA GCGCCCTTC TCCATTGTTT TTAGGATCCT	120
TTTCTCTT ACCAGCTGT AACCTGGAAG TATTCTTCT TCATCCCGAA TCTCCCATGT	180
CCTCCCACT TCTATTGTT TCCATCAAT GTGGATTCAT GATCATTTTA TGGATTTTAA	240
ACTACTCTGG GGCTACCTC GAG	263

(2) INFORMATION FOR SEQ ID NO:49:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:49:

GAATTCGGCC TTCATGGCCT AGAAACACAT GTGATCTGTA CTCATGAGAA CCTGTAGTTA	60
ACTATACGAG CCTTGCTGTG CATTCTGTTT TTATCTGAGC CTGTCTTCA ATGTCTATC	120
CCTTGAGAGA ACTGAGGGCT GAGAACAAG CTTCCGAAG CGGTCTGAGT GTCAGCGGTG	180
GTAGTGGTCT CTGGAGAAAA GAATGGAGAC AGGATAGGAC TTGGAGAAGA GTGAGTCATT	240
GTTACCCAGA AACCTGGAG AACACTGGAC TCGAG	275

(2) INFORMATION FOR SEQ ID NO:50:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:50:

GGGCGTTCTC ACGCCCGCAA CAATTCCTGA GTAGGGCCTT GCTTGAGTTC TTCGAAAGT	60
CTCATCCACC CCCACATCGC CTCTTTAGGA AGTCACTTAA TGTGGGCTT CATTATTCCC	120
ACATCCCTTT CCTTACTACT TGCCTGCACT TCTTGAGAAA AAGACTGCAG AAAGGAGAGG	180
TGGGGCTTTC AGTAGAAACA AGCAAACGCG AGGTCCCTGT GGGGGGACTC TCCAGGAAGA	240
AGGGTAATTT CTGCCTCCT TAAATTGGCT GCTACTGTCA GTTATTTTGC TCCCAACCCC	300
AGAGCTTCAC TTGCTCCTC ACTTCCCAGT TCCGCAAGAA CCGTGGGCGA CAGTTATGGA	360
GAAGCGTCTG CAGGAGGCTC AGCTGTACAA GGAGGAAGGG AACCAGCGCT ACCGGGAAGG	420
GAAGTACCGA GATGCTGTGA GTAGGTACCA TCGAGCTCTG CTTCACTGCG GGGGTCTGGA	480
TCCGAGTCTG CCGTCTCCGT TACCTAATCT OGGACCTCAG GGCCCGGCCC TCACGCCTGA	540
ACGACCTGCC TCGAG	555

(2) INFORMATION FOR SEQ ID NO:51:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:51:

GTGAAGATGG	ACTGCTCTGG	GGCCCATGTG	CAAGTGACCT	GTGCCAAGCT	CATCTCCAGG	60
ACAGGCCACC	TGATGAAGCT	TCTCAGTGGG	CAGCAGGAAG	TAAAGGCATC	CAAGATAGAA	120
TGGGATACGG	ACCAATGGAA	GATTGAGAAC	TACATTAATG	AGAGCACAGA	AGCCCAGAGT	180
GAACAGAAAG	AGAAGTCGCT	TGAGCTCAAA	AAAGAAGTTC	CAGGATATGG	CTATACTGAC	240
AAACTCATCT	TGGCATTAAAT	TGTTACTGGA	ATACTAACGA	TTTGTATTAT	ACTTTTCTGC	300
CTCATTGTGA	TATGTTGTCA	CCGAAGGTCA	TTACAAGAAG	ATGAAGAAGG	ATCACTCGAG	360

(2) INFORMATION FOR SEQ ID NO:52:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:52:

GAATTCGGCC	TTCATGGCCT	AGCTCCTGCG	TAAAGGAGCA	TGAGAGCGTG	GGAGTTTTCG	60
AGTGGCCGTG	GGGTTCTTCG	TCGCGTCTCG	GTGCGGCGTC	GCTTTCTGCA	GCTCCTGTCA	120
GGGAGCGCGA	GGCCTGTTAT	TAACCGCGGA	GCGCTTGTC	ACGAANTCCC	TGTGGCGTCT	180
TGAAGAAGGC	ATTCCCCACC	CGCCAAATGG	CGTCCATGCC	CCCGACGCCC	GAGGCCCCAGG	240
AGAGTCGAGG	TACCTTTTTC	GTCCAAGTTT	ATNGCTGCTT	TCGGTCTCTG	CCTGACCCCN	300
TCCTTTGGAG	GAGAGTTGGG	CATGCCTGTT	GTGGTAGGAG	TGCTCNTGAG	CCCCAAATAG	360
CCCTTTGACC	AAGTGTCTTT	CGTTCCAAGA	CCACACACAT	AATGGTTTAC	CAACTTCNNT	420
CTTTCAGAAC	TACCAACTGG	GAGCAGGGAC	CTGTGGAGGA	ATCTCTGAGA	GAGTTTCTCA	480
ATGCTTTATC	TGTTTGTTTT	GTTTGTGTTG	GAGATAGGGT	CTGGCCTTGT	CGCTGGAGTG	540
TTGCTTGTCT	GGCTGGAGTG	CAGTGTCTGAT	ATCATAGCTC	CGTCTGGAAC	TCAGGGAATC	600
CTTACGCCTC	AGCCTCTCGA	G				621

(2) INFORMATION FOR SEQ ID NO:53:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:53:

GAATTCGGCC	TTCATGGCCT	ACAATTGGA	GCAAGGCTTA	GCAGAAGACG	GCGGCATGAG	60
CAGCGTGACT	CAGGAGGGCA	GACAAGCCTC	TATCCGGCTG	TGGAGGTCAC	GTCTGGGCCG	120
GGTGATGTAC	TCCATGGCAA	ACTGTCTGCT	CCTGATGAAG	GATTATGTGC	TGGCCGTGGA	180
GGCGTATCAT	TCGGTTATCA	AGTATTACCC	AGAGCAAGAG	CCCCAGCTGC	TCAGCGGCAT	240
CGGCCGGATT	TCCCTGCAGA	TTGGAGACAT	AAAAACAGCT	GAAAAGTATT	TTCAAGACGT	300
TGAGAAAGTA	ACACAGAAAT	TAGACGAC	TCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:54:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:54:

GAATTCGGCC AAAGAGGCCT ACATTACTGG GTTAGAAAAC AAAGAGGGAG TGCCTGCAC	60
ATTTCTTTT GTGCTTTAA ATGTTCTTA AGTTGGAACA GGTTCCTCG GGCTGTTTT	120
GACTGATTGC TGGAGTGCAT TTGATAGTTA AAAATTACTA ATTGGTTTA TTTCCCTTCA	180
CACTCTGCCT CCCCTATTTC CCCCAATTGA CCCTAAACCT CGAG	224

(2) INFORMATION FOR SEQ ID NO:55:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 249 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:55:

GATTTAATGC ATGCTAGCAA CAGCCTTAAC TTTGGATTCA GTTATTGAA ACACTTTTC	60
GGCATCTTC CTTTCTAAT GTTGTGGGT GGAACCGGA TGGCAATCA CTGTGAGCCG	120
GATACCTCAG CACAGTCCAC CTTGTGTGT ACTTCAAAA TGGGGGACTT CACAAATGGG	180
GTAAGTGAAT GTTATTACTT TCAAATTTG ACATGGAGCA TTATGATCAA GGAAATGGAG	240
CAACTCGAG	249

(2) INFORMATION FOR SEQ ID NO:56:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:56:

GCTGCGCCGC ACCCTGAGAG ATGGTTGGTG CCATGTGGAA GGTGATTGTT TCGCTGGTCC	60
TGTTGATGCC TGGCCCCTGT GATGGGCTGT TTCACTCCCT ATACAGAAGT GTTCCATGC	120
CACCTAAGGG AGACTCAGGA CAGCCATTAT TTCTACCCC TTACATTGAA GCTGGGAAGA	180
TCCAAAAAGG AAGAGAATTG AGTTTGGTCG GTCCTTTCCC AGGACTGAAC ATGAAGAGTT	240
ATGCCGCTA CCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:57:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 229 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:57:

```

GAATTCTAGA CTTTGTCTCC AGAGCATTGC CTTTATAAGC AGATTGGCAC CAACAGTTCC      60
ATAGTTTAAC ATCTAGTTAA GCTACAAATA TAGTATAAGC ATTATTAGCA GCTGGTACTT      120
CTGCTAGGGG TTGTAAATTC CAGGTGTTAC ACTGACCTCA ATCCAATTIA CATAATTTAC      180
ATAAATGCAT CTCGGTGGAA AAATAATCAT TTTCTTGGCA TATCTCGAG      229

```

(2) INFORMATION FOR SEQ ID NO:58:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:58:

```

GAATTCGGCC TTCATGGCCT ACACTGCTAT GTATGTTTTC TCCTTAATGA TGAAGAGTGT      60
AGATGATGCT AATAATAGTA GCTGATGTAC TGACTTTTTC CTGTGTGCAA AGCCATGTTT      120
AAAATACTTT ACAAGTGTTA ACTTGTTTGA TCTTCACAAC AACCCTAAGA AGTGGATATT      180
ATTAAAGTAG ATTTTGAAG ACTGATCTAT TTAATTATTA ATAGATCTGT CTCATTCCTT      240
TTTTCCCCCA ACTCGAG      257

```

(2) INFORMATION FOR SEQ ID NO:59:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 223 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:59:

```

GAATTCGGCC TTCATGGCCT ACGCGTCTGC TTCGGAGACC GTAAGGATAT TGATGACCAT      60
GAGATCCCTG CTCAGAACCC CCTTCCTGTG TGGCCTGCTC TGGGCCTTTT GTGCCCCAGG      120
CGCCAGGGCC TTTTGTGCCC CAGGCGCCAG GGCTGAGGAG CCTGCAGCCA GCTTCTCCCA      180
ACCCGGCAGC ATGGGCCTGG ATAAGAACAC AGTATCACTC GAG      223

```

(2) INFORMATION FOR SEQ ID NO:60:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:60:

```

GAATTCTAGA CCTGCATGTC CCAGTGTGAA ATTTGAGCAC GGCAATTTCT GCATCCTTTC      60
ATGGCCATCC AAAGGATTCC GCTGCAGAAA TTATTGATGT GCTATTTTTC CTGCTTTGTG      120
ATGCAGGCTG CTTTGGGCCC CTGGGTCACT CTCCAAGGC TGCAACTCGA G      171

```

(2) INFORMATION FOR SEQ ID NO:61:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:61:

```

GAATTCGGCC TTCATGGCCT AAAAAGCAAA AGAAAAGTAA AAGGAAGAAA CAAGAACAAG      60
AAAAAAGATT ATATTGATTT TAAATCATG CAAAAACTGC AACTCTGTGT TTATATTTAC      120
CTGTTTATGC TGATTGTTGC TGGTCCAGTG GATCTAAATG AGAACAGTGA GCAAAAAGAA      180
AATGTGGAAA AAGAGGGGCT GTGTAATGCA TGTACTTGGG GACAAAACAC TAAATCTTCA      240
AGAATAGAAG CCATTAAGAT ACAATCCTC AGTAAACTTC GTCTGGAAAC AGCTCCTAAC      300
ATCAGCAAAG ATGTTATAAG ACAACTTTTA CTCGAG      336

```

(2) INFORMATION FOR SEQ ID NO:62:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:62:

```

GAATTCGGCC AAAGAGGCCT AGAAGAGCAA GCGCCATGTT GAAGCCATCA TTACCATTCA      60
CATCCCTCTT ATTCCTGCAG CTGCCCTGCG TGGGAGTGGG GCTGAACACG ACAATCTGTA      120
CGCCCAATGG GAATGAAGAC ACCACAGCTG ATTTCTTCCT GACCACTATG CCCACTGACT      180
CCCTCAGTGT TTCCACTCTG CACGCTCTCG AG      212

```

(2) INFORMATION FOR SEQ ID NO:63:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:63:

```

GAATTCGGCC TTCATGGTCT ATGCTACTCA GTTGGATCTA GCAGAAACAA AAGCTGAGTC      60
TGAGCAGTTG GCGCGAGGCC TTCTGGAAGA ACAGTATTTT GAATTGACGC AAGAAAGCAA      120
GAAAGCTGCT TCAAGAAATA GACAAGAGAT TACAGATAAA GATCACACTG TTAGTCGGCT      180
TGAAGAAGCA AACAGCATGC TAACCAAGA TATTGAAATA TTAAGAAGAG AGAATGAAGA      240
GCTAACAGAG AAAATGAAGA AGGCAGAGGA AGAATATAAA CTGGAGAAGG AGGAGGAGAT      300
CAGTAATCTT AAGGCTGCCT TTGAAAAGAA TATCAACACT AAACCTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:64:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:64:

```

GCGGGCTAGT CATGGCGTCC CCGTCTCGGA GACTGCAGAC TAAACCAGTC ATTACTTGTT      60
TCAAGAGCGT TCTGCTAATC TACACTTTTA TTTCTGGATC ACTGGCGTTA TCCTTCTTGC      120
AGTTGGCATT TGGGGCAAGG TGAGCCTGGA GAATTACTTT TCTCTTTTAA ATGAGAAGGC      180
CACCAATGTC CCGTTCGTGC TCATTGCTAC TGGTACCGTC ATTATTCTTT TGGGCACCTT      240
TGGTTGTTTT GCTACCTGCC GAGCTTCTGC ATGGATGCTA AAACGTGTAT CAATGTTTCT      300
GACTCTCGTT TTTTGGTCG AACTGGTCGC TGCCATCGTA GGATTGTTT TCAGACATGA      360
GATTAAGAAC AGCTTTAAGA ATAATCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:65:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:65:

```

GAATTCGGCC TTCATGGCCT AGGGAGTCTG AAGCAATTTC TGAAGAAGAC CAAAAAGAAC      60
CACAAAGACGA TGAATGAAAA GGCATGGAAG CGTTGGTGCA CACAAATCCT CTCTGCCCTA      120
AGCTACCTGC ACTCCTGTGA CCCCCCATC ATCCATGGGA ACCTGACCTG TGACACCATC      180
TTCATCCAGC ACAACGGACT CATCAAGATT GGCTCTGTGG CTCCTGACAC TATCAACAAT      240
CATGTGAAGA CTTGTGAGAG AGAGCAGAAG AATCTACACT TCCTTGCAAC AGAGTATGGA      300
GAAGTCACTA ATGTGACAAC AGCAGTGGAC ATCTACTCCT TTGGCATGTG TGCACTGGAG      360
ATGGCAGTGC TGGAGATTCA GGGCAATGGA GAGTCCTCAT ATGTGCCACA GGAAGCCATC      420
AGCAGTGCCA TCCAGCTTCT AGAAGACCCA TTACAGAGGG AGTTCATTCA AAAGTGCCCTG      480
C

```

(2) INFORMATION FOR SEQ ID NO:66:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 583 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:66:

```

GAATTCGGCC AAAGAGGCCT ACGATTGAAT TCTAGATCTG CCCGTCTTGG CCTCGCAAAG      60
TGCTGGGATT ACAGGCGTGA ACCACTGTGC CTGGCATATT TGCTATTAA TTTGCTTTTC      120
TTTAGATGTA TTCTAGAGGG GGGAAATCA GTAGAAGAAC AGTTATGTAA TTCTAACAA      180
TTCTCCATGT GTCTTGCCAT CTNGCTTTT CTCATCCTAT CAGTACTGGA TGAGAATGTT      240
TATTTCACTG AACTTTGCCA AAGAGTTTCA ACATTTTTT GTTTAATCAT AGGAGAAAAA      300
GGTTTATCTT ATTTTAAAA ATTTTATTT AATTCTTTCA TTACAAATGA AGTCCCAGAA      360
GTTGTATTTG TTTCTTAGG CTGTTCTTAA TTGTTTATTG GAACAGGCAG GGTTTGAAGG      420
AGTGGGGATA CTGGGAAAGC CAGGGTGATG AGAAATAGG AAAGGGGTCT TGTCATTGGG      480
AGGCCACTAT ACCAGTGGCC CTTGTACCAG GACTAATATG GTACTTTGAA GCTTTAAATT      540
CATTCTTTTA TTCAATAATT TTAGGCATCC CAGGATACTC GAG

```

(2) INFORMATION FOR SEQ ID NO:67:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 484 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:67:

```

GAATTCGGCC AAAGAGGCCT AGCTATCCGC TTTGCTATTT TAGTGGCATT ATCAAAATCA      60
CTGGAAGCAC CTGTNGTAAT ATGGTCGGTT CCAAATATAA GCTCCTCTGC CACTCTTCCT      120
CCCATACTAA CATCCATTG TGCAAGCAGC TGGGCTCTAG TTTCATTCCA TCTGTCATTG      180
TCAGGTAACA GGGACACATG TCCAAGTGTG GGCCCCCGTG GCATGATTGT AGCTTTGTTG      240
ATAGGCATTG CATCTTTTGT GTAATATGCA ATAATGGCAT GACCAGATTC ATGATATGCT      300
GTGATGGTTT TGTTTTGTG ATCAATTTC ACACCTCTTC TTTCAGGCC CATTAGAATT      360
TTGTCITTGG AAAACTCCAG CTCCTTCATG GTAACCATTT CTTTCCATC AACAGCTGCT      420
TTTAATGCAG CCTGGTTCAC AAGATTCTCC AACTCTGCTC CGGAAAAGCC AACAGTACCT      480
CGAG

```

(2) INFORMATION FOR SEQ ID NO:68:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 458 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:68:

```

GAATTCGGCC AAAGAGCCTA ATTGAATTCT AGACCGGCCT CATCGTTCTT TGCCTTCCTG      60
GTCACCATCT GCTACGCTGG AAATACATAT TTCAGTTTTA TAGCATGGAG ATCCAGGACC      120
ATACAGTGAT TTACCATTTT GATAATTAAA AGGAAAAAAA AAGGAAGACT CTCACTGTAA      180
AAACAGCTGT AGGTATAATG TATATCCCA GAGAATTGTA TTTAACTAAT TAATGTTTTT      240
TATATCTTAA AATTGCTCA CAAATTGTGG TTTGTTACAA TTAAACTGGA TACTTATTTG      300
CAAAGTGTG TAGCTTATA TGAACCTTAT AGTATCTTAT TAATGTATTA ATGCTTTCAT      360
AGATCATATT TTCTTAGACA ATGTTTAAAT AGATAAATG CTAATATTGA GAATGTGTCA      420
AGTTTGTAAG CCTAACTTTT AAGATGCCAG AACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:69:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 157 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:69:

```

GAATTCGGCC AAAGAGGCCT ACGGCCAAAG AGGCCTAGGT GGTGATTGAC CTAAGAAAAA      60
AGTGTCTTAA ATATCTGGAT TCTATGGGAC AAAAGGGCCA CAGGATCTGT GAGATTCTCC      120
TTCAGTATTT ACAGGATGAA AGTAAGAACC GCTCGAG

```


(2) INFORMATION FOR SEQ ID NO:70:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:70:

```

GAATTCGGCC AAAGAGGCCT AGTGGACTGC TACTCCCTT TAGCACTATA TACAAACATA      60
ACTGCTACTT CCCTTTAGCC CAGGATCAAA ATAATGATT AGTTAAAAGT TGCTTGCCCTA      120
ACAAAATTTC AAAATATGGA CTTCTGTGAA TTGCTAAAAC ACATCCTTTT AACTAGGCAT      180
CTTTAAGTCT ATAGTATCTT TAAAGTTAAT TTCAAAATTT AGCAGAGCCT GGAACACAAA      240
TTATTCAGGA AATAATTCCT GAACCTACCT CTATCTTCAT AAAACGTATT GGGGCAAGAA      300
CTATTCTATT GAATTCTAGA CCTGACTCGA G                                     331

```

(2) INFORMATION FOR SEQ ID NO:71:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:71:

```

GAATTCGGCC AAAGAGGCCT ACCATCTGTC ACTAATATCA AAGGAGGGCC AAGGACACAG      60
CCCTGGGGGA ACTTACCAGG TCAACCCACA ATGGGTGAAT TTATAGTTTG TTAGTTAGTG      120
GTCAGTTACC AACTTCTCTG TCTGTCTAAT GCTTGACTA AAATGTCCAG ATTATTTACC      180
TAGTTAACAA AATTAAAGAA GATTCTAAGA CCAGTTTAGC ATCATTCTCT CTGAAGTCCA      240
TAATGAATGT CTGTTAACT CTCGTCACCT TTATTAGGT GCTTTTGGGT CATTGTGTGT      300
AGGTTTCATC TCCCAAATCA ATGTCACATA TACGTCTGTA ACTTGTGTTA TCAGCTTCCT      360
TCCTAGGGCT TTAAGTCTT TTCAGTCTTA TAGCATTCTT TCCATTTTCC TTTTCAAGTT      420
CTCCAATAAA AGCTCGACAA ACTCCTGGGA GCCCCTTGGT GCTCGAG                                     467

```

(2) INFORMATION FOR SEQ ID NO:72:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:72:

```

GAATTCGGCC AAAGAGGCCT ACGATTGAAG TCTAGATGCA CACATTCAGC TTCTGTCTCA      60
GTCCTGAGAG TGTTTGTGTT TTATTGGCTG ATGAGTTATT TCCACATATC ACATGTATAA      120
GGTATTTGAA TGAAGGTGCT TTGTAGTCAT GACACACTAC TCTTTTACTA ATTATTAATA      180
TCTTAAGATT ACAATTGAG AGGTAGAGAT GGTATTGTTT TTAATGGGTG TGGGGGGTGG      240
TGATGATAGG TATTTTACC CTGGTAAGTG ACCTACTAGG TTTTATTAAG TGTTGCAACT      300
TGTCAGTGT GTGGATGGGA TCTCGAG                                     327

```

(2) INFORMATION FOR SEQ ID NO:73:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:73:

```

GAATTCGGCC AAAGAGGCCT AGTGGTGGA TGTATTGAG TTCACAGTAT TTGTTTATA      60
GCAGTTTTCG AAGCACATAC TGTGCCACGG ATTTTCCAC ATTATTTTGA GACAAGGGAA      120
CACAGCCATC AAAACTGATA CCATGGCCGG GCGTGGTGGT GGGTGCCTGT AGTCCCAGCT      180
ACTTGGGAAC TCGGACATT CTCGAG                                         206

```

(2) INFORMATION FOR SEQ ID NO:74:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:74:

```

GAATTCGGCC AAAGAGGCCT CCACCATGCC CGGCCTCAAC GATATTGATT CTTTGGGCTG      60
TAGTCAGTAT TGGATTATGA TCAATATTAT CACCATTAT TTTGTGCTC CAGTTCCTCC      120
AGCTGTGGCC AATCCTTCAG TTGGATTCTT GTGCCCCATC AACATTCTCC ATCCTTCTCT      180
CGAG                                                                    184

```

(2) INFORMATION FOR SEQ ID NO:75:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:75:

```

GAATTCGGCC AAAGAGGCCG ACTTTATTAT ACCATACATA CTATAGGTAC CTGGGCACAA      60
GATAGGTCAG GGGGTACTGT ACCCCTATTT ACATGCTTAA TCACATCATA AGGTTGCAGG      120
TGGTACTTGA AATCATCACT AATGAGACAG CAAATATGTT AGACTTGCTG GCCCAGCAAG      180
CCACAGAAAT AAGGATCACC ATCTATTAGA ATAGACTGGC TTCAAACCTG AG              232

```

(2) INFORMATION FOR SEQ ID NO:76:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:76:

```

GAATTCGGCC AAAGAGCCTA CTAAAATTCC TTGTTTGTG TTTTAAATAT TCCATCGTTG      60
ATAGTTAATA TTCTTTTNGA GGTITTTGTTT TAGACAAAGT AATGTTTTTC TGAAATGATT      120
CTAAGACAAT TGGTCAGAAA TAGTCTCTGC TTGTTTGGTT TATGTTTGGT CAGTTGTGCT      180
TTGATTATAG ATGGTTCCTC ATCTGAGATT AAAGTGGGAC AGAACTTCAA AAGTAAAAGG      240
GTAAATGTTT GCTGTGATGC TTATGTGGCA CATGTGCTAG TCCTTGATAG TGGCGAGAAA      300
GATCTTAATT GCTCAAAGGA AGTACTCGAG                                     330

```

(2) INFORMATION FOR SEQ ID NO:77:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 507 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:77:

```

GAATTCGGCC AAAGAGGCCT ACAGTGCATT ATGTTATTTT GTTATCTCTG CAGTAACTTT      60
CTATCATGTT ATTTATTTTC TTTGTCTTAT TTAAGCTTC TGAGATTATG GATTTTGTGTT      120
TCCTTCCCTG AAGTTAAGTG TTATCATTCC TATATAGTAC TAAGCTGTCT ACAGAATAGT      180
GGGAGTCTGC CCTCTTGACT TGGGAAGATC CTAGTTTGAA TCTTGGCTGT GCGACTTTAA      240
AGTTCATTAA CTTCTCTTAG CCTCAGTCAC CTGAACCTCG CAGTGGGGAT CCTTATGCCT      300
CAGAGTGTCA TTGGGAGGAC TCACGAAAAA ACGCTTGTAC TTTGAGTTCA GTACCTAGCC      360
TGTATGAGCC AGCATTAGA GGGACAGTCA TCACGCAGCG CTTTGCACAC AGCTCTCAG      420
CCACATCCTT TGGCTACTGT TTTGTTAAAT CTTTACTAGT AAATGTTTCT TAAAGCATT      480
TACATTCATG GACATGATTC CCTCGAG                                     507

```

(2) INFORMATION FOR SEQ ID NO:78:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:78:

```

GAATTCGGCC AAAGAGGCCT AGATTGAATC TAACCTTTTT GCCTCTTCCC AAGTAGCCTA      60
TTTGAGCTAG AACAAAACCT TGTTAGCCAT TTTGGGAGAG AATAGGGAAT CTAGAGAATG      120
AAGATCTGCC CGACCTGCCT CGAG                                     144

```

(2) INFORMATION FOR SEQ ID NO:79:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:79:

```

GAATTCGGCC AAAGAGGCCT AACGACGTA ATCAAGTTT GTCACAGAAG CATCAAGAAA      60
CTTAGCTACT GCTTCCAAAT CAGTACCGGT TTCAGTTAAG CCTTGAATAA TACAGTCTTG      120
AAACTGAGTA GGGTCAAACC TCTCTTTTC ATCTCTTTT CTAGTTTAA AACGCTGGCC      180
TGATAGCGTT GGCTTTTGCT GCTTTTGATT ATTCATAAAA GACACCCGAA TTAAAGGCGA      240
AGAGGAAAGA GCCAGAAATC CCCGATGTAC CGGCAACTGC GCGCTATCT CCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:80:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:80:

```

GAATTCGGCC AAAGAGGCCT AGACTGCTGG TGGTGAAGT CTTTCTTGT AGGTTGTGAG      60
GGCTGAAAAA GCCAATCTTA ATAGACATGA GGCTCATGTT TGCACAGTGT GCTCTCGAG      119

```

(2) INFORMATION FOR SEQ ID NO:81:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:81:

```

GAATTCGGCC AAAGAGGCCT ACTCAGCTGC AAAAAAGCAT ATTTCTGTG TTTCTGGACT      60
GCACTGTNGT CCTTGCCCTC ACATAGACAC TCAGACACCC TCACAAACAC AGTAGTCTAT      120
AGTTAGGATT AAAATAGGAT CTGAACATTC AAAAGAAAGC TTTGGAAAAA AAGAGCTGGC      180
TGGCCTAAAA ACCTAAATAT ATGATGAAGA TTGTAGGACT GTCTTCCCA GCGCCATGTT      240
CATGGTGGGG CAATGGTTAT TTGGTTATT TACTCAATTG GTTACTCTCA TTTGAAATGA      300
GGGAGGGACA TACAGAACTC GAG                                          323

```

(2) INFORMATION FOR SEQ ID NO:82:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:82:

```

GAATTCGGCC AAAGAGGCCT AGGCAATCA GAACTCTTAA GTTGTTCAT CCTTATTTA      60
TTCTTAAAT AAAGAATTC ATTTCAAATA CGGATTAATT TTTTCTGG GAAAAACAC      120
ACTGTAAAC ATAATTTCT ACCTTTTAA ACGTTTACA ATTTATCCA TCCTTAACA      180
AGTTATGATA CTCATACCTG CCGAGGTTTC TCTAAATTG TCGTGGTCT TCTTTTCTCT      240

```

CCATTTCCAA GGCTTAAAGA TTTTACCAAT GGTGGATAGT TTCCCTTTTC TTTTGAAGGG	300
AGGTGTTTGG GAACCTGCTG TGGGGCCATC TGAGTTTGCT ATAGAAGCTT TGTCCAGTCC	350
GTCAACTGAG CCGGAGATGT GGACCCGGAG CGGGCGGCCC CTGCTCGAG	409

(2) INFORMATION FOR SEQ ID NO:83:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:83:

GAATTCGGCC AAAGAGGCCT ATAAATATAT AATTGACTTA TTTATTAAAT TTAGGAGAAA	60
AAAAAAGTTT TCCTTGACAT TCAGCTCTAT TGGATTTATT TCCATTTAAT TGCATCATGT	120
GTTATGCTCTT GGTAAACACT CCATTTCCTG TCTTGGTGGG CATCCTGTCT GTGTACCTGT	180
GCAGTACACT TTAATCATCA AGACTTCAAA GTGCTTTTGA GCTATCAAAT CTTGGGAGAG	240
TCCCATCTAG CATCTTAATA ATTATTTTTC CAAGTTCGTT ATAATTAACCT CCTTTAACCT	300
CATCTCATT AATCAATTTT GTATTATCAT TCTGTTGTT TCTGGAAAGC AGCCAATTGT	360
TCAGCTCTTG AATCAGAATT TTCAAAGACT CACCTCTCTT ACCTGGGCTT GCACATATTT	420
GTCTTAAGTA ATTCTCTATC CCTTAAACCT CTGAGCCCTC GAG	463

(2) INFORMATION FOR SEQ ID NO:84:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:84:

GAATTCGGCC AAAGAGGCCT AATTTTGTA AAAGGAATAT CATCTTTGA TTTTAGATCT	60
TAGACATCAG GCACTGACAT AGAGCTTAGA TATGTTCTTA AGGTAGCTAA GCCATTTATT	120
ATAGGATAGT CAGATAGGAT AGTTCTAGGA TTTATAGACC TTTTCAGATA CTCTTTATCC	180
AGTGAGAGAT GACCTATTTT TATTAAACT TGGGTTTGGT ATCTTGGAAT TGGCTTGAAA	240
ATGATTTGTT TTTACATTGG ATGTGAACGG AAAGTTTGTA TCTCAAATGT TTTACCACTT	300
GAAGGGACAG CTCGAG	316

(2) INFORMATION FOR SEQ ID NO:85:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:85:

GTGGACATGG AAGTAGGTGA GGTGGGGGA CCTATGAAGA AAAAAAGAGC CTTTCCACTG	60
GGCAGTGAAG TGTGTACACA CACACTGGGG GCAGAGCAGT GTGAAAACAT TCTGCACCAG	120
CACACAAATG ACTTTTGGA AATCATCTNC CTGATCTGTC GGATGTTACG TCTCTGCAGA	180

```

ATCTGGAGAA AACCAGAAAA CCCAGCTTGT TTGCCCTCAT TTTGGCAGTT TAATTTAGGA      240
ATCACACTGG CTTTACATAA ACTCTTTACC AAAAAAAGTC TATTCTGTAT TTTGAAGGCA      300
CAAGTTAACA TGGGCCCAAG GGAAGGAAGC ATTGTATACA ATTACATAAT AGCTACTCTA      360
TTACTTTAAA ACCTAATGGC AGCCTCGGGC AGAAAAGTCA AAAGGGGAGA GAAACCATTT      420
CTGTGAAATT ATCTGATGCA ATCATCTCTT TGGAGACATT GTCAGTTGAC AATGGTTCG      480
CTTTTCTCT CGAG                                         494

```

(2) INFORMATION FOR SEQ ID NO:86:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 507 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:86:

```

GAATTCGGCC AAAGAGGCCT ACGGGAGCAG TTCATGCAGC ACCTCTACCC ACAGAGAAAA      60
CCTCTTGTGT TGGGAAGGGAT TGATTTGGGG CCATGTACAA GCAAAATGGAC AGTGGATTAC      120
CTAAGCCAAG TTGGAGGGAA GAAAGAAGTA AAGATTCATG TTGCTGCAGT TGCACAGATG      180
GACTTCATTA AACTTTACCT TTTGACCAGT TGGTCCAGAG GGCAGCTGAA GAGAAACATA      240
AAGAATTCTT TGTTTCAGAG GATGAGAAAT ACTACTTACG GTCACTTGGG GAAGACCCTA      300
GAAAGGATGT TGCAGATATC AGAAAGCAGT TTCCTTTGTT GAAAGGAGAT ATTAAGTTTC      360
CAGAATTCTT CAAAGAGGAA CAGTTCCTTT CCAGTGTGTT TCGAATTAGT TCACCAGGAT      420
TACAACTATG GACTCATTAT GATGTAATGG ATAATTTGTT AATACAAGTG ACAGGAAAAA      480
AGCGTGTGTG ACTCTTCAGT CCTCGAG                                         507

```

(2) INFORMATION FOR SEQ ID NO:87:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 282 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:87:

```

GAATTCGGCC AAAGAGGCCT AGCTTATCCA GTCTAGTAAT TTTTGTGTA TGTGTGCACA      60
GCACAAATAG TTACAATAGT TCCCTTTTTT GACATCAAAT TCAACAATAC CTGGCATATA      120
ATTGCTAAAT ACTGTCATCA TTTTCATTAT CATTATCCCC CACATAGTCA TAAATAAGCA      180
CACATGCTAA TCTTCAACTC TTCTTCTATT ATTTGCTGCC TTCTTACCTG CGTTAGTGAG      240
AAAGTGCCTT CAAATAGATT GCCAACAGTT ATATGGCTCG AG                                         282

```

(2) INFORMATION FOR SEQ ID NO:88:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 333 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:88:

GAATTCGGCC	AAAGAGGCCT	AGTGCAGTAT	TCACGTGTAA	C'TTTAAGTT	TTCAGTACAG	60
TGCTTTTATA	CCTTTAATGC	AATGTTGTAT	TCATTGGGT	ACTATTGTGT	AGTATTTAGG	120
ATGTATGCAT	GTTTGTTTAT	ATGTAAGCTT	GGTTGGTGCT	TTCGCTTTTG	TGCTACCTTT	180
CTTGGATTTT	TGTACCAGAG	ATGTGCTAAA	CTGATGAAAT	ACATTGAGAA	AGTTTCCATC	240
TTATTCTTTT	ATATGGGACT	GATGATGTGT	GTTGGGGTAG	ACTGCTCCTG	CAGAGTTTGG	300
AAGAAGTCAC	CAGCAAAGCC	GGCCAATCTC	GAG			333

(2) INFORMATION FOR SEQ ID NO:89:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:89:

GAATTCGGCC	AAAGAGGCCT	AGGTTTCTAG	ACTGGAAGAA	CAAATGAATG	GCTTAAAAAC	60
ATCAAATGAA	CATCTTCAAA	AGCATGTGGA	GGATCTGTTG	ACCAAATTAA	AAGAGGCCAA	120
GGAACAACAG	GCCAGTATGG	AAGAGAAATT	CCACAATGAA	TTAAATGCCC	ACATAAAACT	180
TTCTAATTTG	TACAAGAGTG	CCGCTGATGA	CTCAGAAGCA	AAGAGCAATG	AACTAACCG	240
GGCAGTAGAG	GAATACACA	AACTTTTGAA	GGAAGACAAG	GAACGCNAGA	AAAAAGACGA	300
AGAAAAGGTG	AAGGCAGAGG	AAGAATCAAA	GAAAAAGAA	GAGGAAGAAA	AAAAGAAACA	360
TCAAGAGGAA	GAGAGAAAGA	AGCAACTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:90:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:90:

GAATTCGGCC	AAAGAGGCCT	AGCTTCTCTG	CTTTATTAT	TCATTTATTT	TTAATTTTTT	60
GAGATGAAGT	CTCGCTCTGT	CATCCAGGCT	GGAGTGTGGT	AGCGCCATCT	CAGCTCACTG	120
CAACTTCCAC	CTCCAGGTT	CAAGTGCAAT	GTCTTTTAA	TGTCTATGTG	AAGGATTCTG	180
AGCTGTACGA	GTTCTGCCCC	AAATCTGCAC	TTGGGCCTCA	GGATCAGGCC	GCCTCCCCAT	240
CAATCTGGTG	GATGCCAGTT	ATAACCTTTG	CCCTGCACCC	CATCCACACT	GTAGTTCAGA	300
GAAAATCAAC	AGTCAGCAAT	CATATCACA	GCACTCGAG			339

(2) INFORMATION FOR SEQ ID NO:91:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 203 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:91:

GAATTCGGCC	AAAGAGGCCT	ACGAGTCAGC	ATCTAGACTC	AGCTCCTTCT	TCCCGCCTGC	60
------------	------------	------------	------------	------------	------------	----

CCTCACÀCAT GCGTGCATTC ACTCTCCTGT CCAGGCTCAT GTCCTTGTGC CCGCTTGCTG	120
CTTTGCCTCC TTGCTTGTTT CTGACTTGCT CACCCACTCT CTGTCATTGT CTTGCTTACT	180
CAGGCTCACC CTATCAACTC GAG	203

(2) INFORMATION FOR SEQ ID NO:92:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 127 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:92:

GAATTCGCC AAAGAGGCCT AGTTGAATTA TTGCCACATG TTAGGAATST GGAAGGTTGC	60
TTGGATAAAT GAGAAAAGAA AGAAAAGAAT GCAAGTAATG TCCTGCTGGG GTAGTGCACT	120
CCTCGAG	127

(2) INFORMATION FOR SEQ ID NO:93:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 179 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:93:

GAATTCGCC AAAGAGGCCT AGATCCACG AATTTAGGCT CAGAAGCATC GTCCTCTCC.	60
AGCCCTGCAG CTATTCACCA ATATCAGTCC TCGCGGCTCT CCAGGGCTCC CTGCCCTGAC	120
CTCTTCCTG GGTTTCTGC CCCAGCCTCC TCCTTCCCC CCCCCTATA TCCCTCGAG	179

(2) INFORMATION FOR SEQ ID NO:94:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:94:

GAATTCGCC AAAGAGGCCT ACTGGAATCA CTAACTTTG TCTCATTTTT TTTCTCTTCC	60
ATCAAATATC AATTTTGGAT TCAGATCCAG TTTTCTTCTT TCAATTATTT CTGCCCTTTA	120
AAATAATACT ACCTCCTTCC TCCACAATT CATTTCAGCT TGTTTTAGTT CCTTGGGTTT	180
TATATTTTTT CTTCTAGTA TTACAATATA TGCACAAATA TTAGGTTATA AAACCTCCAA	240
TACAACTTTT ACTGCCACTC ACAGGTTTTT CAATTGTTTT CATTTCATG TACATTAA	300
TAATGTATAT ATTAGGATA CTCGAG	326

(2) INFORMATION FOR SEQ ID NO:95:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 340 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:95:

```
GAATTCGGCC AAAGAGGCCT AAATATGAAA AGCTGTCTAT ATCTACCCAG CCAAACCATC      60
TCCAGCTTTT ACTTTTATTG AGCAAGTATA CGTTATTTAT TTAGTCATCC ATTCATTCAT      120
T TACTCATTT ATTTATTTTT TTTTCAGCTT ATTTCTGCTT TCATCTTAAT TCCTCTCTTA      180
AACTTTTGG TATCACATTG GTTCTCCCTG ACCTCCACCA CTGTAACCTG ACTTAAGTTA      240
AATGTTTAAAT TTATTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT      300
TTAGGTAGA GAAGATGTCT CACCATGCTG CCCACTCGAG                                340
```

(2) INFORMATION FOR SEQ ID NO:96:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 240 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:96:

```
GAATTCGGCC AAAGAGGCCT ACTTCTTCC TTATTCTACT TCTCTTTTTT TCTTTGTTC      60
AACATCATGT TTGTGAAAGT TTCATGCATA TCGTTGCAAG TATTTGTATT TCATTCATTT      120
CTATTGTTGT ATAATGTTAC ATTGCATGAA TATGCAGCAA TTTGTTCTAC TGTAAAAAGC      180
AATAAGGATT TAGTTATTTT CAGGTTGGAC ACAAATAATT TTGCTATGAA GGGTCTCGAG      240
```

(2) INFORMATION FOR SEQ ID NO:97:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 330 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:97:

```
GAATTCGGCC AAAGAGGCCT ATAATATAT AGCCTAGAAT TTTTCTATT CTGTTATTAA      60
GCCTCTATCA CTATCTTTG ATTCTAGGTT TTATAATCCA TTCTTTTTTA TAACAACCTG      120
TTCTTGTTTT ACTTTCCCT ATTTTGTGTT TATACCCATC TATCTTTTT TAGGATCTAT      180
TCTCCACTTT TAACTTTGAG GATTCTAAAA TACTTACTTT AAAGTTATTT TTAAGTTGTT      240
CTATTTTGT TTTTGTGAG AGCGAATTG CCTTTTTTAT TTGGCTGTTT TACCATGCTT      300
TTTGAATTT TGTTTTGTAG GCTTCTCGAG                                330
```

(2) INFORMATION FOR SEQ ID NO:98:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 279 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:98:

```

GAATTCGGCC TTCATGGCCT ACTCTACTCC AAGTAGGAAA AGGCCAGGAG GTCCTGTAA      60
AGGATGCACT CAGAGCCCGG GCTCCCTAAC GTATGAGAGT GCTAACCGAG AGGTGTAGAC     120
TTTTCAGGAG TGAAGAATGA GGCAGGCATT CCAAACCTGG ACCTTCATCA CCTTTGTTT      180
CATCTCAAGA CAATTCTGAG GGACTGTTT GGAGCGTGTC TGGAAGGTGA ACGTTGAAGA      240
AGAGTGTGGG CTTTGATGTG ACTCAGTTGA ATACTCGAG                               279

```

(2) INFORMATION FOR SEQ ID NO:99:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:99:

```

GAATTCTCAT GAAACTCTCA GCGGAAAGCT ACAAGGAAAC ACAGATGGTG AAGATTAAAG      60
AGGAACCCAT GGAGGTTGAC ATCCAGGACT CCCATGTCTC GATATCACCC AGCCGGAATG     120
TTGGCTACAG CACTTTAATC GGGCGAGAGA AAACCGAACC CTTACAGAAG ATGCCAGAGG     180
GCAGAGTACC CCCAGAGAGA AACCTCTTCA GTCAGGATAT CTCTGTGAAA ATGGCTCCG      240
AGTCCTCTT TCAACTGTCA GAAAAAGTGA GCAAAGAGCA CAATCATACA AAAGAAAACA      300
CCATCCGGAC CAATCTCGAG                               320

```

(2) INFORMATION FOR SEQ ID NO:100:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:100:

```

GAATTCGGCC TTCATGGCCT AGAGCAACAT AGTGAGACCT CATCTCTACA AAAAAATAAG      60
AGAAAATTAG TTGGGGGTGG TGGCGTGAC CTATAGTCCC AGCTACTCAG GAGGTTGAGG     120
TGGGAGGATC ACTTGAGCCC AGGAGTTTGA GGCTGCAGTG AGCTGTGGTC ATGCCACTGC     180
ACTCTAGCCT GAGTGACAGA GCAAGATCCT GTCTCAAAAA ATAAAGTAAA ATAAAATAAT     240
CAGTCAACAA CAGTGATTG TCTTCAAGCT GCCCTCCTCT TCGGCTCTCA AGGCAGTTT      300
TGAAGTGCT AGGATAGGAA TTTCCAGAA GGGCTTGCTC GAG                               343

```

(2) INFORMATION FOR SEQ ID NO:101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:101:

```

GGAAGATGTG CCAAAGTTCA GAAACATAA TCTTATCTGA TCAGATTAAA GATCACAAC 60
CCAGTGAAGC CAGATTTTCT TCAAGAATA TTAAGGATT TCGGATTAGCA TCAGATAATG 120
TAAGCATTGA TCAGTTTTTG AGAAAAGAC ATGAACCTGA ATCTGTTAGT TCTGATGTTA 180
GCGAGCAAGG CAGTATTCAT TTGGAACCTC TGACTCCATC CGAGGTACTT GAGTATGAAG 240
CCACAGAGAT TCTTCAGAAA GGTAGTGGTG ATCCTTCAGC CAAGACTGAT GAAGTAGTGT 300
CTGATCAAAC AGATGACATT CCTGGAGGAA ATAACCCNA CACTCTCGAG 350

```

(2) INFORMATION FOR SEQ ID NO:102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:102:

```

GAATTCGGCC TTCATGGCCT ACTCGCGGTC TGTAGTAGT ATAGTGATGC CAGCAGCTAG 60
GACTGGGAGA GATAGGAGAA GTAGGACTGC TGTGATTAGG ACGGATCAGA CGAAGAGGGG 120
CGTTTGGTAT TGGGTATATG CAGGGGGTTT TATATTGATA ATTGTTGTGA TGAAATTGAT 180
GGCCCTAAG ATAGAGGAGA CACCTGCTAG GTGTAAGGAG AAGATGGTTA GGTCTACGGA 240
GGCTCCAGGG TGGGATGAGC GGGCCAAGAT CGATGATCCC ACAGACTCCA AGCCTGAGGA 300
CTGGGACAAG CCCGAGCATA TCCCTGACCC TGATGCTAAG AAGCCCGAGG ACTGGGATGA 360
AGAGATGGAC GGAGAGTGGG AACCCCAAGT GATTCAGAAC CCTGAGTACA AGGGTGAGTG 420
GAAGCCCCGG CAGCGTCTCG AG 442

```

(2) INFORMATION FOR SEQ ID NO:103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:103:

```

GAATTCGGCC TTCATGGCCT ACAGAAAGTA AGTTGGAACC ATGTAAGAAA AAAAGACACA 60
AATAAACTA GGAAAGTGGC ATGGAGCTAG GCGTGAAGTT GCTGCTCAGT TTACATGTAT 120
GAAGTTCGT GTGGACTTAA GCTCCTACTT CAGTCATTTA TTGTATGACT TGGACAAGTT 180
GCCAAACATC TCTAATATTC ATTCATATTT GTAGGGTAAA AGGATGAGTA ATATGTATCT 240
TTAGTGATA AAACATTAC AGACAACCTG AG 272

```

(2) INFORMATION FOR SEQ ID NO:104:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:104:

```

GAATTCGGCC TTCATGGCCT AAGACACCAG CGAGCCCAGG CAGGTAATGG AAGCAACTGT      60
AGCTGACTGG ACCTAAGAAG CAGTGGCAGC GGTGCCAGGC ACCCCAGCTG ACCTGCTTGG      120
GTGCTCAGAG CAGCAGGGCT GGCCATGGTC AGGGAGTCTG GGGAGGTCAT GCTCTGTCCA      180
CAGGGTTCTA GCCAGCTTCT GCCAAATTGT CTGTTTTTTC TCAAGAGAAG CTGGGAAGGC      240
CAGTTGTGGT GTCTCATACC TGCAATCATA GCACTATGGG AGGACTCGAG      290

```

(2) INFORMATION FOR SEQ ID NO:105:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:105:

```

GAATTCGGCC TTCATGGCCT ATGAAAATTT GGAAGAAGAA TCCAATGAAA GTGGTAGCCC      60
TTTTGACCTT GTTTTGAAG TTGAACCTAA TCTCTAACGA TAACCCAGAG GAACATGTAC      120
TGAAGGTAAT TCCTGAGGAT GCTTCAGAAT CTCAGGAGAA GCTAGACCAA AAAGAGGATG      180
GTTCAAATA CGAACTATT CATTGACTG AGGAACCAAC CAACTAATG CACAATGCAT      240
CTGATAGTGA GGTGACCAA GACGATGTTG TTGAGTGGAA AGACGGTGCT TCTCCATCTG      300
AGAGTGGGCC TGGATCCCAA CTCGAG      326

```

(2) INFORMATION FOR SEQ ID NO:106:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:106:

```

GAATTCGGCC TTCATGGCCT ATGGCAATGG TGGTCGTGGT GCTGGGTGGG ATGNGGTCTT      60
CATCCTCTTC CTCCAGGAAG GATGCCTCTG GGATATGGCT GAAGGCCTCT GGGTGCAGCC      120
TGGCCAGTTT CCCTTTCAGC GTCCTGATAC GCGGGAAGAT GATGTCCAGG TCCCGTTTCA      180
TCTCTACTAG GGTCTCTGTG TGGTGCAGGA AGCCTTCGCT CATCTGCTGC AGCGGGGCAT      240
TGGACAGGTT GTTGAAGTTG AGCAGCATCT CATTGGTCTT CTCAAAGCGG TCCAGCATGT      300
TCTTCTGGGA CAGGATGATG GCGTTGACAT CATCTGTGTT CACCATGCTC AGGATGCGGC      360
CGCAGAAGAC CCTCGAG      377

```

(2) INFORMATION FOR SEQ ID NO:107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 601 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:107:

```

GAATTCGGCC TTCATGGCCT ACATGACACC ACCTGAACGT CTCTTCCTCC CAAGGGTGTG      60
TGGCACCACC CTACACCTCC TCCTTCTGGG GCTGCTGCTG GTTCTGCTGC CTGGGGCCCA      120

```

```

GGGGCTCCCT GGTGTTGGCC TCACACCTTC AGCTGCCCAG ACTGCCCCGC AGCACCCCAA 180
GATGCATCTT GCCCAGCA ACCTCAAACC TGCTGCTCAC CTCATTGGAG ACCCCAGCAA 240
GCAGAACTCA CTGCTCTGGA GAGCAAACAC GGACCGTGCC TTCTCCAGG ATGGTTTCTC 300
CTTGAGCAAC AATTCTCTCC TGGTCCCCAC CAGTGGCATC TACTTCGTCT ACTCCAGGT 360
GGTCTTCTCT GGGAAAGCCT ACTCTCCCAA GGCCACCTCC TCCCCACTCT ACCTGGCCCA 420
TGAGGTCCAG CTCTTCTCCT CCCAGTACCC CTTCCATGTG CCTCTCCTCA GCTCCAGAA 480
GATGGTGTAT CCAGGGCTGC AGGAACCTG GCTGCACTCG ATGTACCACG GGGCTGCGTT 540
CCAGCTCACC CAGGGAGACC AGCTATCCAC CCACACAGAT GGCATCCCCC ACGCACTCGA 600
G 601

```

(2) INFORMATION FOR SEQ ID NO:108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:108:

```

GAATTCGGCC TTCATGGCCT ATTTTTTTTT TTTTATCAA AAGTTGTTT TATTTTCAAT 60
ACAAGATAAA TACCATGCTT GTTACTAGTG CAGTTCTCGA G 101

```

(2) INFORMATION FOR SEQ ID NO:109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 512 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:109:

```

GAATTCGGCC TTCATGGCCT ACAGAATTGG AGGCATGATG AAGACTCTGC TGCTGTTTGT 60
GGGGCTGCTG CTGACCTGGG AGAGTGGGCA GGTCCTGGGG GACCAGACGG TCTCAGACAA 120
TGAGCTCCAG GAAATGTCCA ATCAGGGAAG TAAGTACGTC AATAAGGAAA TTCAAATGC 180
TGTCAACGGG GTGAAACAGA TAAAGACTCT CATAGAAAAA ACAACGAAG AGCGCAAGAC 240
ACTGCTCAGC AACCTAGAAG AAGCCAAGAA GAAGAAAGAG GATGCCCTAA ATGAGACCAG 300
GGAATCAGAG ACAAGCTGA AGGAGCTCCC AGGAGTGTGC AATGAGACCA TGATGGCCCT 360
CTGGGAAGAG TGAAGCCCT GCCTGAAACA GACCTGCATG AAGTTCTACG CACGCGTCTG 420
CAGAAGTGGC TCAGGCCTGG TTGGCCGCCA GCTTGAGGAG TTCCTGAACC AGAGCTCGCC 480
CTTCTACTTC TGGATGAATG GTGACACTCG AG 512

```

(2) INFORMATION FOR SEQ ID NO:110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:110:

```

GAATTCGGCC TTCATGGCCT AAATTATTAA AGGTGACAGT ACACAGGAAA CATTACAATT      60
GAACAATGCC TCAGCTATAC ATTTACATCA GATTATTGGG TGCCTATTTG TTCATCATT      120
CTCGTGTTCA AGGACAGAAT CTGGATAGTA TGCTTCATGG CACTGGGATG AAATCAGACT      180
CCGACCAGAA AAAGTCAGAA AATGGAGTAA CCTTAGCACC AGAGGATACC TTGCCTTTTT      240
TAAAGTGCTA TTGCTCAGGG CACTGTCCAG ATGATGCTAT TAATAACACA TGCATAACTA      300
ATGGACATTG CTTTGCCATC ATAGAAGAAG ATGACCAGGG AGAAACCACA TTAGCTTCAG      360
GGTGTATGAA ATATGAAGGA TCTGATTTTC AGTGCAAAGA TTCTCCAAAA GCCCAGCTAC      420
GCCGGACAAT AGAATGTTGT CGGACCAATT TATGTAACCA GTATTGCAA CCCACACCGC      480
TCGAG                                                                485

```

(2) INFORMATION FOR SEQ ID NO:111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:111:

```

GAATTCGGCC TTCATGGCCT ACACACATTG TGAGCTGTAT ACGTTAACCC AAAGTCTGCA      60
TTCAAAGTGG AATTATAACT GGGCAGTGAA TGAGTTGCTC AGTCCATCTA TTAACCATAC      120
TCTTTTAGGC TTTTATTGTC CTCTAATTGT TGAATAAATT AACATTTTCC CAGGAAGTTG      180
TTTTACAGAA GAAGGGGCTT TAGCGGCTTT CAACTCTTTA GAGATAAGTT CAACTTTGTG      240
GATTGACCAC AGCACATCTT GTTTAGTAGT GAGCGGGAGC CATATGAATC CTCAGAGAGC      300
ACAGCCGTGT CTGAGATGGA CATTGCCAAC ACAGCTCGAG                                                                340

```

(2) INFORMATION FOR SEQ ID NO:112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 533 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:112:

```

TTCGGNCTTC ATGGCCTACT CTCATAAAAA TATTCAAAGA TCAACCCCAA ACGTGCCTGC      60
ANTTTGACA ATGTNAGCTA AAGCTATAAA TGGACAGCA GTGCTCATGG ATGATAAAGA      120
TCAATTATTT CACCCAATTC CAGAGTCTGA TGTGAATGCT ACACAGGGAG AAAATCAGCC      180
AGATCTAGAG GATCTGAAGA TCAAATAAAT GCTGGGAATC TCGTTGANGA CCCCTCCTCT      240
CTTTGTGGTC CNTCTGGCA TTCTGTAGTG CTACACTGTA CAAACTGAGG CATCTGAGTT      300
ATAAAAGTTG TGAGAGTCAG TACTCTGTCA ACCCAGAGCT GGCCACGATG TCTTACTTTC      360
ATCCATCAGA AGGTGTTTCA GATACATCCT TTTCCAAGAG TGCAGAGAGC AGCACATTTT      420
TGGGTACCAC TTCTTCAGAT ATGAGAAGAT CAGGCACAAG AACATCAGAA TCTAAGATAA      480
TGACGGATAT CATTTCATA GGCTCAGATA ATGAGATGCA TGAACACTC GAG                                                                533

```

(2) INFORMATION FOR SEQ ID NO:113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:113:

```

GAATTCGGCC AAAGAGGCCT AGAAAATAGA AAATCAGGTA GCTATGTCAT TTTATAAGCA      60
TCAGTCTCCA CCAGATTTGT CAAGTGAAGA AAGTGAAACA GAAAAGGAAA TTTAAAGGAA      120
AGCTGAAGTT AAGAAAACCA AAGCAGGAAA CACCAAAGAA GCAGTGGTTC ACCTGAGAAA      180
GAGCACAAGA AACACAAGTA ATATTCCAGT GATTTTGGAA CCTGAAACTG AAGAAAGTGA      240
AACAGAAAAG GAAATTAAAA GGAAAGCTGA AGTTAAGAAA ACCAAAGCAG GAAACACCAA      300
AGAAGCAGTG GTTCACCTGA GAAAGAGCAC AAGAAACACC CTCGAG                      346

```

(2) INFORMATION FOR SEQ ID NO:114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:114:

```

GAATTCGGCC AAAGAGGCCT AGGCAGGTAT TCTTTGCTTT GGGAAATTCT TCTTTCTGTC      60
CTCCCTTCCC TCACTTTTTC CAAATTCTGG GCACAACAGC AGCTCTCTCT CTCTGTGGC      120
AGGTGTGCAT CCTATTGGCT GGCTGGTATT TCTTGTTTTT TTTCCCCCTT ATTCTTTTAA      180
AATGGGGTG GGGGTATAAA AATATGTGTA TGGGTACAT GCAATAATGT TGTAAATGTT      240
CTTGTTGTTT AATGGATAAT TAATTGCAAA ATAATTGTTT TAATTATAAC ATGTTTGAGT      300
AAATGCTAAA TTAGTATTTT TTCTAATAT AATAATGAAT TTGAAATCTA GCATTCTGT      360
AACAAATGTG CTATGTTTGT CTGTCTGTGT CTGTCTAATA GTAATTAATA TCTGTGGTCC      420
GCACCCACTC GAG                      433

```

(2) INFORMATION FOR SEQ ID NO:115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:115:

```

GAATTCGGCC AAAGAGGCCT AAGCAAAGCT TAGCTTACGG GGAAAAAAAA AAAAAAAAAA      60
AAGTAGAGCT TNCCTTGAAT CTGGAGAAAT TAAGCACACA GGTGTCTGTC AATATTAGTT      120
AAGAGACTAC TGCACCCATC ATACTGTAGC TTAAGACAGT TTCTTCTTTT AGTTTTTTCT      180
AAATGTCTC CATGTCTGTG TTATGCCACA AATAACACAG CCTTGGTTAA CTTTGGGACT      240
AAAAAAATC AACTTATTGG CCAAGCATGG TGGCTTACAC CTATGATTGT AGCACTTTGG      300
ATAGGTCTCG AG                      312

```

(2) INFORMATION FOR SEQ ID NO:116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:116:

```

GAATTCGGCC AAAGAGGCCT AATTTTCCTA ACTGTGTGCT GCCTTTTGGG TTAATTAGAA      60
TTGTAGCATT TCGTTTIGAT TATTTTITG GCTCTTTAGC TGTCTCTCA CATTITTTAA      120
AATGGTAACT CTAGGGATTA TAATATGCAT CTTTAATTA TCAAAGTCTG TTTTACTAC      180
TTCGTGTAAA ATAAACGAAC CTTGCATTTA TAGTTACATT TATTCCTCTC ATCTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:117:

```

GAATTCGGCC AAAGAGGCCT ACTCAAAAGT AGATGAGCAA TTGGTCAGAA TTGTTAGAGG      60
ATATTATTG AGCTAAATGT TTCCTCTCTC TGTTCAGTG GTGTATGTGC AAGTGTGTGT      120
ATATGTTTT TGTGGGGAC AGTTTCAGGT AGATGGTATG AAGAGGCAGC AGGAGACTCT      180
CGAG                                          184

```

(2) INFORMATION FOR SEQ ID NO:118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:118:

```

GAATTCGGCC TTCATGGCCT AATTTCTAA AACCTGGAGA CAAACCACAT AAATACAAA      60
CAAGTCTGCT TCTTCAAAAT TCTGCTGGTG AGAACTCAGA TATCAGTGAT CTTATTAGCT      120
TTTTCACAAG CCAGAACATA ATGGTGACGA TGATTAATGA CAGTGACTAT GTATCCGTGG      180
CTCCCCATAG TGGCGCTTA AATGTGATGC ATTCAGAAAA GGACTATGTT TTTGCAGCTG      240
TTTCAACAG TACTATGGTT TATTCTTTAC CTATATTAGT GAATATCATT AGTAACTACT      300
ATCTTTATCA TTAAATGTG ACTGAAACCA TCCAGCTCGA G                          341

```

(2) INFORMATION FOR SEQ ID NO:119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:119:

```

GAATTATGCT GTGCTGTTTT CCTGGACACT CAGAATCAAA CAGGCCTTCC ACCCATCCC      60
ATCATGTTGA ATTACAAAGT ATTTTGAGCA TCGTTGGTT TGTTCCTTC CACCCATACC      120
TGTGTAGGAC AGCGGTAGCA GTCTTCAACA ATGCATCCTC TTGGACAATG CATTGTAATA      180

```


TCTCTCTTTC AAATTCTGTT TCACATAGTC ATTTCTCATG TTCTGTTGGA GACCCCCAAA 240
AAATTCATTC CACACTGTCA TCCCTTTGTC CTAACCAGAA TCTCGAG 287

(2) INFORMATION FOR SEQ ID NO:120:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 196 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:120:

GAATTCGGCC TTCATGGCCT AATGTATGGT AGACAATTTT TTTTAAAGAC ACAGAGATAA 60
ACGTTTTCCT GCTTTGGTTA CCTTTCCTTT CCCCTTAAA AGGAATTAGC TATAGAAGTC 120
CTTTGTAAAG ATGCTTCTTG ATATTTTACT TTTGTTCCCT TTCCCTAATC ATTCCCTTTT 180
CACCCCACTC CTCGAG 196

(2) INFORMATION FOR SEQ ID NO:121:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 117 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:121:

GAATTCGGCC TTCATGGCCT AGTGATTGGG TGCAGAGGAA ACAGGAACCA GAGAAGGGTC 60
ATCTCAGCTG CCTGTCCAC TCCCTATGCT TGGTGTTACC TGCGCCATAG TCTCGAG 117

(2) INFORMATION FOR SEQ ID NO:122:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 234 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:122:

GAATTCGGCC TTCATGGCCT AGTAAGTGCT CTGAGTATAT TAGGAAAAGG AAATCTTATA 60
CATAAAAATC AAAGCTGTTG CTAATTTTTC CACTAGTGAG TCAGTCTATT AACATTACTC 120
ATGGTAGGTT TTGCCATACA GAATTTTAAT TTTTATATAT TATTTTGGC TTTGTTATTA 180
TGCTTAGAAG TCCATGGGGA CCCAAAGATC AGAAAAGATT CATCTGTACT CGAG 234

(2) INFORMATION FOR SEQ ID NO:123:

- (i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 265 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:123:

GAATTCGGCC TTCATGGCCT ACGGAACGAA CATTGGCTCG GCGGTGGTGA TGCTAATTC	60
CACTGTCTATG TTCACAGTGA TGGCCGTCTT TTCCTTCATC GCCCTCAGCA TGTTTCATAA	120
ATTTTACCGG GGAAGTGGG GGAGTTTCAG CAAAGCTCAG GAGGAGTGA CCACAGGGGC	180
CTGGAAGAAT CCACATGTGC AGCAGGCAGC CCAGAACGCA GCCATGGGG CAGCCCAGGG	240
TGCCATGAAT CAGCCAAGAC TCGAG	265

(2) INFORMATION FOR SEQ ID NO:124:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:124:

GAATTTGCCA CACCATGAAG CTCTTGTCG AGGTAAGTGT GCACCACCAC ACCTGGAATG	60
CCATCCTGCT CCCGTTTCGT TACCTCACGG CGCAAGTGTG GATTCTGTGT GCAGCCATCG	120
CTGCTGCCGC CTCAGCCGGG CCCAGAACT GCCCTCCGT CTGCTCGTGC AGTAACCAGT	180
TCAGCAAGGT GGTGTGCACG CGCCGGGGCC TCTCCGAGGT CCCGAGGGT ATTCCCTCGA	240
ACACCCGGTT CCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:125:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:125:

GAATTCGGCC TTCATGGCCT AGGAAAGATT CGTGTTTTAC TTTAATAAAC CTGAAAGAAC	60
TGTCGTTTTT CACTGCCTAT AGGACCACTA CAAAGCCGCA AAGAAAAATT AGACTTGTTT	120
CATTTTATAA CAACAACAAC TGCTACTACT GCTACTAGT AGATACCGTT TGCTCATTTA	180
TAACAATCTC AGTTGGTAGG ATGAAGCTTA AACACTTGGC ATTCATCGTC TTTTTCAGTC	240
CTCTCGAG	248

(2) INFORMATION FOR SEQ ID NO:126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 337 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:126:

GAATTCGGCC	TTCATGGCCT	ACTGTCTTTT	CATGCAGATT	TCATATTGTC	TTTGTCTTTT	60
TCATTGCTTC	TTGACCTTCC	TGGCAGGTGT	CGCTCAGTTT	CTTCCTGTTT	CCCTTCCTGT	120
CCTCTCCACA	CCTGCTATCC	CGTCCCACTC	CCATCTACCT	CCCGGGAAGC	CAGCCCTGCA	180
TGCTGAGTTT	GTGACCTGCT	TCATTCCCAT	TTCAATTTCTA	GAGGGTTTAG	AGGTGACCTG	240
GAACCGTTCC	CTTCCCTCT	CCTACCCCT	CCTCTGCAAC	ACCAAGAGGC	CTGGAGGGGC	300
AGACAGAAAG	CAGCCAGCCA	CGGCGGGAAG	TCTCGAG			337

(2) INFORMATION FOR SEQ ID NO:127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:127:

GAAATTCGGCC	TTCATGGCCT	AACCTATTTT	TTTTGTTGAT	TGCCTGTCTT	TCTTTTCTTT	60
TCCTTCCCTC	CCTCCCTCCT	TCCCTTCCTT	CCTTCCTTCT	GTAGAGATGA	GGTTTCACCA	120
TGTGGCCAGG	TTGGTCTCTG	GCTTAAAGTG	TCCTCGCACC	TCAGCCTGGC	AAACTGCTGG	180
GATTACAGGT	GTGGGCCATC	ACGCTGGGCC	TTACAGTAAA	TTCTTGATAA	ACAACCCAGC	240
AACACACCTC	GAG					253

(2) INFORMATION FOR SEQ ID NO:128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:128:

GAATTCGGCC	TTCATGGCCT	AGGACGGGGG	ACTCAGGTTT	TACACTGGAA	CCTGGGGTCA	60
TGTATCATGT	ACCAGGTGGG	GAGAAGTGTA	GCAAATCTCA	GTGCCAATTT	GAGGGGAAGC	120
CAGTCATTCC	AGGAGAAGAG	CTGAGGGGAA	AGAGCTGTTG	ACTTTTATAA	TGCAGTCTTA	180
ATTATCCAGT	CACCTCTCTG	CCACATGGCA	GAAGCCAGGT	GGCAGTGATG	GTGGTGGGGG	240
AAACAAAACA	CACAGTCTCT	GGCAAGCCCC	ACCGGGAAG	GAGGGCTCAG	AAGGCGTAGC	300
GGGTCCGGAT	ATCCTCGAG					319

(2) INFORMATION FOR SEQ ID NO:129:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:129:

GAATTCGGCC	TTCATGGCCT	ACAATAAAAG	CCCATAGGGA	AGAGAGAGAG	GATATAGGGA	60
AACAGAATCA	GATGTGTAAT	ATACTTGGCA	CAGCGAAAAA	ATGGATTTAA	AAGACAAAAA	120
TGGAGGTCCA	GGTAGATGTA	ATTCACACAG	ACTGAAAGTG	AGTTCGGGCT	TGTGTAAAC	180

ACATGAGATT GGATTGACC CCTTGGCTCT CAAGTGTCCT CTTAGATCTA GAACTGCTCC	240
TTGGTGGCCA TTAGATCGAG TCAGTTTGA TCTGCATCAC TTAGTTATTG GGAATTTCTT	300
TGTTGGAAC AGGAAATTT TTTAGATTA TTTGGCGTAC GGCTCGAG	348

(2) INFORMATION FOR SEQ ID NO:130:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 420 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:130:

GAATTCGGCC TTCATGSCCT AGGCACAGTG AAACCCGTGG AAATTCAAAG GTGAGCAGGA	60
CAGTGGGTCC TGTATCTTGA TCTTTACGGA TCTTTCTCTT CTTGAATCCT CACAGCACCC	120
ATTTTATAGA CAGGAAGACT GAGGCCCGAA AGTTCTGTCT GACTCTGAGC CTGGCCTCTT	180
TGCTGCCTCC CGTTGTCTG TGAGGCTGTG TGGTCACAGC ACCCAGGACT TGAGAGGAGT	240
GAAGTTCTTC CTCACCCCGC AAAGGCTTCA TGAGCCCTAC TGTGTGCCAG GCCAGCCCTG	300
CTCAGTCTGG GCGATAAAC ACAGGGCAGA TTCTGAAAGC CTGTGTGAGG GAAGTTCTAG	360
GCCTGCAGGA GCTGAGAGGA GACCCTGGAG AGGAAGGGAG TCAGGGCCAG CTTCCTCGAG	420

(2) INFORMATION FOR SEQ ID NO:131:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:131:

GAATTCGGCC TTCATGCCTA AGCTGATGGA GACTGTAAAT GAACCAGAAA CAGGTGAAGT	60
GAGCAAAGAT GCAGTCATTG TAAAGCAGGA GAAAAATAAT GAATATTGCC TTCAGGATAT	120
TGATGATAAA TTGTGAGAA CAGCAGAGGA TGATGGTGAA GATGATACCA ATGATGAAGA	180
TGATGATGAA GATAGTAACC CTAAGAAAGAA TACTCAGGCC CCAGTAGAGT TAATGGCAGA	240
ATTTCTGAGA GCAGAAATGG CCCGAGAGTA CCAGCTGGCA AAAAAATTAT GTCAGATGAT	300
CCTAATCTAT GAACCAGAAA ATCCTGAGGC CAAGGAGTTT TTCACACTTA TTGAAGAAAT	360
GTTGCTGATG GAGAAACTC AGAATCATGA GCAAGACGGT GAAAACAGTG ATGAAGACAG	420
CAGCGGGCTC GAG	433

(2) INFORMATION FOR SEQ ID NO:132:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:132:

GAATTCGGCC TTCATGCTCT ACAAATCAA CTGCAAGCAG CCATCATCAG TTTGGAAGAA	60
GCTTTGGGAA GCCTTCAAAG AAAACCTCG GTATCCACCA AGTCAGGCTC AAGCAGCTCT	120

TCAAGACAGT CCCCTGAAG AGTACTCCTA TAAGAAATCA ATAAGAAACC TGTAAAAA	180
CATTCCTTTT GTCCTTCTGT TGATCACTTA TGGTATCATG ACTGGTGCCT TTTATTCACT	240
CTCAACGTGA TTAATCAAA TGATATTGAC ACAACTCGAG	280

(2) INFORMATION FOR SEQ ID NO:133:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 398 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:133:

GAATTCGGCC TTCATGGCCT ACGCGAGCGG CAGGTGTGCA CAGGAGGTTTCCACTTTGT	60
NCTCTGAACT CGCGGTGAGG ATGGTTTCT CTGTCAGGCA GTGTGGCCAT GTTGGCAGAA	120
CTGAAGAAGT TTTACTGACG TTCAAGATAT TCCTTGTCAT CATTTGTCTT CATGTCGTTT	180
TGGTAACATC CCTGGAAGAA GATACTGATA ATTCCAGTTT GTCACCACCA CCTGCTAAAT	240
TATCTGTTGT CAGTTTGGCC CCCTCCTCCA ATGGTACTCC AGAGGTTGAA ACAACAAGCC	300
TCAATGATGT TACTTTAAGC TTACTCCCTT CAAACGAAAC AGAAAAAACT AAAATCACTA	360
TAGTAAAAAC CTTCAATGCA TCAGGCGTCA ATCTCGAG	398

(2) INFORMATION FOR SEQ ID NO:134:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 403 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:134:

GAATTCGGCC TTCATGGCCT AGGCGCATGG TGGGCAGAGG ATCCTTAGTG CTCAGTCGGG	60
CTCCACCAGA ACCACGGACT TGAAGGAGAA GAGACTCTCG GTTCCAGGTA GCAGAAAACG	120
TGGAGTTTTC GACACAGATC CTCCTGGCCA GAGAAGGATG CTTGAGAATC TGAGATTAC	180
ACAGCTGTAT TAGGTTGTCC ACGATGACCG GGCAGTAGGT CTCTCTCTTG GGGATTTCCT	240
CAGTGGTCTG CCAGAGACGG GCGTGAGAGA TCACATTCAG AACGCACTCG TCTTGGTTCT	300
CTATGTGGTT CCTTGATCA TCAACAAGGC TAAGCACTTT CTCGGAAGG CCTTCTATTA	360
ACTTGGTCTT GGTGAGCCAG AGGCCTGCT TTACACCCTC GAG	403

(2) INFORMATION FOR SEQ ID NO:135:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:135:

GAATTCGGCC TTCATGGCCT ACTCCATTTT TCGAATGGCT TATTTAGGCC CAGCTCTTGC	60
GTTTGCACTG TCCCTTCAGG CCCAGAACTT TCTCAGTCA TCGTCACCAG GCCTAGCTTC	120
TGCATCTGGT CAGCCTTTTA AGGCCAGCT TTTGCCTCAT AAATCAGCT CCTGTTTAAT	180

GGCGGCCTCC CGGGTCCCAC TCGAG

205

(2) INFORMATION FOR SEQ ID NO:136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 112 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:136:

GAATTCGGCC AAAGAGGCCT AGTTTTATTA CTTTGGTTAA GACATCAGTT ATTTAGTCT 60
TTGATAATTC ATTATCTAGA TAATGGTTAC TTTGTATTGT CTGTTTCTCG AG 112

(2) INFORMATION FOR SEQ ID NO:137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 111 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:137:

GAATTCGGCC AAAGAGGCCT ACACAGAGCC CTTCAGTACT TTAAATCTT CTAAATTGG 60
TGGTTCATGT TAATTAAATT ATTATTATTT TTTTGTGAGA CGGAATCGA G 111

(2) INFORMATION FOR SEQ ID NO:138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:138:

GAATTCGGCC AAAGAGGCCT AAAGATGTTT TCCATGAGGA TCGTCTGCCT GGTCTAAGT 60
GTGGTGGGCA CAGCATGGAC TGCAGATAGT GGTGAAGGTG ACTTTCTAGC TGAAGGAGGA 120
GGCGTGCGTG GCCCAAGGGT TGTGGAAAGA CATCAATCTG CCTGCAAAGA TTCAGACTGG 180
CCCTTCTGCT CTGATGAAGA CTGGAAC TAC AAATGCCCTT CTGGCTGCAG GATGAAAGGG 240
TTGATTGATG AAGTCAATCA AGATTTTACA AACAGAATAA ATAAGCTCAA AAATCACTA 300
TTTGAATATC AGAAGAATCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:139:

GAATTCGGCC AAAGAGGCCT AGGTCCAGAA ACATTTAAAA AAAAAAAAAA GGGGGCTTGA	60
GAAAAGGGCT TCCAGTGCCA GGCAGAAATA TGTTTTCTT AATAGGGC	108

(2) INFORMATION FOR SEQ ID NO:140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:140:

GAATTCGGCC AAAGAGGCCT ATGAAAACGT GGATTTGCTT TGTAACCTTG AGAATACATT	60
TTGTTGCCAA CAAAAAGAGA GAAGAGAAGA GGAAGATATT GAAGAGAAGA AATCGATTAA	120
GAAAAAATT AAAGAACTTA AGTTTTTAGA TTCTAAAATT GCCCAGAACC TTTGTAAGTA	180
TCATATTCCA ATACCATTCA AAGACAGTGG AAATATTCTT TTAAATGATT TCATTTTCTT	240
TAAGACCGAT TATTCAATTAT TTGCTATTTT CATTTTGTTA TTATATGCAT GATAAATTC	300
CAGATACTCT CGAG	314

(2) INFORMATION FOR SEQ ID NO:141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:141:

GAATTCGGCC AAAGAGGCCT AGGGAAGAC TAGAGTGTTT TAAATCATCA ATAAAAAGTG	60
GAGAAAACAA AGGTTATTCA GCGATTGAAT TCTAGACCTG CCTCGAGCCC TGCCTTTCTT	120
TTACTTTTAC TTTTTTTTTT TTTTCTTTG GAAGAGAGAA GAACAGAGTG TTCGATTNTG	180
CCCTATTTAT GTTTNTANTC GGGAACAAAC GTTGGTTGTG TGTGTGTGTG TTTTCTTGTG	240
TTGGTTTTTT AAAGAAATGG GNAGAAGAAA AAAAAAATTC TCCGCCCTT TCCTCGATCT	300
CGCTCCCCC TTCGGTTCTT TCGACCGGTC CCCCCTCAAC CTGCCTCGAG	350

(2) INFORMATION FOR SEQ ID NO:142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 167 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:142:

GAATTCGGCC AAAGAGGCCT AGAGAGTCTG GATGACAAGC AAAGCTCAAT CTCAAACAA	60
--	----

TAATTTTAA AGTAATGATT ATCTTAACCA TTCTTAAATC CTTCTGTCTA GTAGGAATCT 120
TATTCATGGG AGTGTCTGGA AAAGGGACAA AGAGCGGCTA TCTCGAG 167

(2) INFORMATION FOR SEQ ID NO:143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 216 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:143:

GAATTCGGCC AAAGAGGCCT AGTGTTCAC AAAAGAATTG GAAACCATAG TCCTGAACTC 60
TCCCTAAGTA GTATAAGCTT TAAATAGCAC TCAATCCATA TTAAGTCTTC TTAGTGTAGC 120
ATGTTGCTC TCATGCGTCT TTCTTATGTT TAAATGGTG TAAATTTTAG TCGTTTGTCA 180
TTCAGAAGTG GCTTTGCAAA TACAAAATAT CTCGAG 216

(2) INFORMATION FOR SEQ ID NO:144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:144:

TAATCTTTAC TGGTGAAAAG GATGGAAAAA TAAATCAACA AATGCAACCA GTTTGTGAGA 60
AAAAAAAAAA AAAAAAAAAA CGAAAAAAAAA AAAAAAAAAA CCTGAATGCG GAAGAGCTCG 120
GCTCCCGTTT AGCATTTTGT ACTTAAGGAA ATAAAAAACC AACAAAGGAT CTCACATTTT 180
CTTAAAAAGT GAAGATGCT GTATACTATT TATTCAACTT ATAATTTATG TTACTCCTTG 240
ATCTTTGTCT TTTGTCATGA CAAAGCATTT ATTTAATAAA GTTATGCATT CAGTTCTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:145:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 177 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:145:

GAATTCGGCC AAAGAGGCCT AGTCTCTGTT AATCCTACTC TGCTTTAGCC AGAATAGCCT 60
AGTATTTTAT TTCTATTTTA TATATTGAGA TTTCTTCTAA CATTCCTTT GATAAAAAATC 120
TTCTGCTTTT TGAAGAGTGG TATGTATCAT ATTTTATGT TTCTGGTGTG TCTCGAG 177

(2) INFORMATION FOR SEQ ID NO:146:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:146:

GAATTCGGCC AAAGAGNCGT AGGGAAGAT TTCAGCTATT AATCAACTGG AGGAAATTCA	60
AAGCCAGCTG GCTTCTCGGG AAATGGATGT CACAAAGGTG TGTGGAGAAA TCGGCTATCA	120
GCTGAATAAA ACCAACATGG AGAAGGATGA GGCAGAAAAG GAGCACAGAG AGTTCAGAGC	180
AAAACTAAC AGGGATNTTG AAATTAAAGA TCAGGAAATA GAGAAATTGA GAATAGAAGT	240
GGATGAAAGC AAACAACACT TGGAACAGGA GCAGCAGAAG GCANCCCTGG CCAGAGAGGA	300
GATTCTCGAG	310

(2) INFORMATION FOR SEQ ID NO:147:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 353 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:147:

GGTGGCCTTG GGTCAAGATT CGCACCATGG TGGGCACAAA CCCAGGAGAA CACTTTCCTG	60
TAAACGTGTT TTCATGCTGG AGCCAAGGTT TTGACTTGGG TTTGGATTTT TATTTATTTA	120
TTTATTATTA TTATTACCAG GTTGCATCTA AAGGATGTTT TGGAGGAGCA CAGAGTTTGT	180
CTGGTGAGGG TAGGCTCTGG GCAGATTTT CTGTGAGTCT CCCCTGCCTG CGGCATCAGG	240
ATCATCCCTG GTGCCCTGTG GTGGCACCAG GTGGCTGCCC ACCCAGAGGC GTGGCCTTCA	300
CAGTGGGGGC CATCTCAGCC TGGGGTAGCG ATCTGCCTCC GACCTGCCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:148:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 283 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:148:

GGCCTGCATC GCAACAGCCA GGAGGGCCAG GCCACCCAG GCAGGAGGCA GTGGGCTGGC	60
AGCCACCCCTG GGCACAGAAG AGCAGACGCA GACAGTGCTG GGCAACGAGG GGCTTCTTTC	120
ATGGGCCCCGC CTGCCCTGTC CCTCCCCCA GGTCCCCACC TTCTAGGTTT AAAGTGCAGC	180
TGGGAGGGAG GAGGCAGGCA GAATTGGGGA GCTAGAGAGA GCCCAAGTGA ACCCTGACTG	240
TCCACGCAAG TCCCATGTCC TCCTCGTCCT GGAGTTCCTC GAG	283

(2) INFORMATION FOR SEQ ID NO:149:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 321 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:149:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAGTTCCTT TTGTTATTTC CCTGCATCTT      60
ACAACGTAA  GGCCTTGGTC CTGCTAATA ATAAATAAT AATCAACTTT ATAAAGAGCT      120
TACAATATGC CAGATACTGT ACTAAGTGCT TTATATTTTT TTTTGGGTG GGGGGTGGCT      180
GTTGGGCAGT GTCTCGCTCT GTCACCCAGG CTGGAGGGCA GTGGCACAGT CATGGCTCAC      240
TGCGGCCTTG ACCTCCTGGG CTCAGGCCTC CCGCCTCAGC CTCCCAGGTG GCTGGGGCTA      300
CGGGCGTGCA ACATTCTCGA G                                     321

```

(2) INFORMATION FOR SEQ ID NO:150:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:150:

```

GAATTCGGCC TTCATGGCCT ACGTAATTCT GGAAAAGTGA ATACTTGTGA AGAGTCGTCT      60
TGAATGATTT GTAAAAAATC CTGTTCTTAT ATTCACGAGG TTTCGAATCT TTGTCAGAGG      120
AGTATTACCA TTAGATTGAA AAAAAGGAAA ATAAATAATA AACACTTTTA AAAAACTCC      180
CCATTCTCTT ATTCTCACTT TTAGGAAAAG AGACTGACTA ATATCTTCTG CCACAATAC      240
CGATGTTCTT AAAAATATTT ATGGGACTGC TTTGGCAAC CAGCCCTATT TTGTTTTCAT      300
ATCCCTTTTT GTCCTCATCT TTCCAAACTC ATAAACTCGA G                                     341

```

(2) INFORMATION FOR SEQ ID NO:151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:151:

```

GAATTCGGCC TTCATGGCCT ACTCGCCTCT ACTAAAAATA CAAAATTAG CCAGGCACGC      60
GCCAGGTGGT GCGCACCTGT AATCCCAGCT ACTAGGGAGA CTGAGGCGGG AGAATTGCTT      120
GAACCTGAGA GGTAGAGGTT GCACATAGCG CCACTGCGCT CCAGCCTGGG CAACAAGAGT      180
GAGACTCTGT CTCAAAAAA TATATAAATA AATAAATGAA AAAAAAAT TGTATAACAT      240
CTATACTATA GCCTCGTAAG CATTAGCTAC TTAATATTTT TGGTATATTT AATAATTTTA      300
ATACAGCATT TTTGATTACT AGTGAACATG AATATTTTCC CATATTGTT AATTATACTT      360
TCCTCTTACA GAAATTCTGT TTGTGCCTT CACCTTCAC TCGAG                                     405

```

(2) INFORMATION FOR SEQ ID NO:152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:152:

GAATTCGGCC TTCAGGGCTC CTTCCTCCTA GGCTAGTATT TATCCCACTA CATCTGACTC	60
ATTCTCTACT ATCGCTGTTG ATTCCTCTT GGGTACTAAA TCTGTTGAAC ATGTTGCCAG	120
GCTTACTGCT GGTATTATGG GATAGCATTT GCCTGATGGC AGCTTCTAAA GGAGACTCCG	180
ATGGCACTAA GCAGTTTCCA AAAGTTTATC TTGCAAGTTC AACCCAATTC GAG	233

(2) INFORMATION FOR SEQ ID NO:153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:153:

GAATTCTAGA CCTGCCTCGA GATGTTTTTT TCGTTATTG AAATCTTGC TCTTTATTT	60
TTCAGCTCCC AGATCCTCTC CCTCTCTTA GCTTTCAGT TGTGATAT CAAGAATATG	120
AAATGTGAAT TCCACGGACT CGAG	144

(2) INFORMATION FOR SEQ ID NO:154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:154:

GAATTCGGCC TTCATGGCCT AGGCAGGAAG GAGGCTGGAA TAAATAAAAA TAAAAATAGA	60
CAAGTAAGAC AGCATAAATA ATACATTTTT AAACATGTCA ACATTGATAA TACAATGAAG	120
ATTTACCATA AAAAGTATCA TATCTAACCA AGATATGCAA AAGATGCATT CAGTAAGCTG	180
TAACGTTGAG AAATGTAAC GTGAAATCAG CTCACCAGTT CAAGTCACTA GGTGTCAC	240
TTGGACCGTC TTGGTTTCAG CGAGCATAGC GAGTGGCTGT AAGAAATTGT CCATGCCACC	300
AATTCCACTG CTAATTGCCC AGGTGGTCTC GAG	333

(2) INFORMATION FOR SEQ ID NO:155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:155:

GAATTCGGCC TTCATGGCCT AGGAAGTGA GGAAGCTGG GTCGCTGCTG GAAGGGAGGG	60
AGGCTGACTC TCTACCCCTC ACCTCTGCAA GGAAGTGAAG CCTGTAGGGT TGCGGCTGTC	120
ACTGGCTACA GCGGCATCT TTCTGTAAAA AGCTTTTCAG GCATGAAACC CATTTCTGTA	180
TGGACTGGGC TGTGTTGACG GTGGTGCTTG GGCCTTGTGT GCCAGGCCTC TCTGGGTCCC	240

CTCCCTGGCC TTTGCCTTCC TCTCACCTTC TCGAG

275

(2) INFORMATION FOR SEQ ID NO:156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:156:

```
GAATTCGGCC TTCATGGCCT AGAGTCATAG GTCAGACCAC TTTCTAGGAG CTGTTCAAGT    60
ATAAAATTAA TAACAGTGAC TTTTGAGTCA AAATAGATTT TTAAAGTACT TGATTTTCTC    120
TTTGATTGGG AACATCTTTT GTTAGCTTA ATTGAAATGA TCTAAATAT TTGAAGGATT    180
TTATACTTTA CACAGAGGCA TGTATTGGA TAATTAGCTT TTATTAAACC CAGGCTTCCT    240
CGAG                                                                    244
```

(2) INFORMATION FOR SEQ ID NO:157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:157:

```
GCGATTGAAT TCTAGACCTG CCTGAACCCC ACCCTTCACG TCCTACTTGG GCTGCCAAAG    60
TCATCTTCCC AAAACATGAC TTTTCCTCAG TCACTTTTCT TATTAGATT TATCATATTC    120
CACATCCCTT CCTGGCCCT CAAGGGTGCC TGTAACCTAG AACCATCTTA CCTTTCACC    180
CTTGTTTCCA AACCTTCGCG TTTACTTAGA CATGCCTTCC CATTTCCCTC CCGACCCACC    240
CCCCTCGAG                                                                249
```

(2) INFORMATION FOR SEQ ID NO:158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:158:

```
GAATTCGGCC TTCATGGCCT AGAAAAAAC AAGTAGTTTG GCAAGGAGAG CAGAAAAATA    60
AAATTCCACT GTGTAGGCAT TTGGAGATT AGCAAGAGCA ACCTAGAGTC TGCCCCCAGA    120
GACACTGCAC GTTGTCTCTG ACACAGAGGA TGCACTAATT CTATTTCTCT TGCCACCTGA    180
AAAAATCATA ATTTGAGAAG AGAACTGTT AGGCCATTTC TAGTGAAC TA TTTTCCAAA    240
CCCTCACGGA ACCCTGAACA GGGCGTGTCT CGAG                                274
```

(2) INFORMATION FOR SEQ ID NO:159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:159:

```
GAATTCGGCC TTCATGGCCT AAGCTTGCTC ACTCTTCTGT GTGTTTGAAA TAATGGTAAA      60
ATACAATAAT ATTGTCAAGC AAGTGGATC GGAGATTTT CTCTCAGGA CTATTCTGCT      120
TATAGGTCTA CTCCTATAG CTATTGTCA TTGTCCTCCT GGTCTTCTC TTTCTTCTC      180
TCCTGTGCTA GATGCTCTCT CTCCTATCC CTCCTCTCT TCCCACCCC ACCTCCCACT      240
TCTCTGTTTA TATCTGATT TTGGTGAAC ACATCCTCCA GGCTCCCTGG CACTCGAG      298
```

(2) INFORMATION FOR SEQ ID NO:160:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:160:

```
ATGGCCTAAG GTGCCCAGC TTGCCAATTA ATTCCCAGTA GAAATTTTA AATGTTAAAG      60
ACAGTAATTA AAAAAAAAAA AAAACCACAC TGTTTTGACA TTTTACCTCG TGCTTTGTGT      120
GTGACTAGAT TATGCACTAG AATTTCATTC AGTATTCTTC CAAATAAGTT ATTTCCCAGG      180
TGTTGCTGG TATCTAACCA ANTANTCAAT AAAGTATTCT TGCTAAGTNG GCCATGAAG      239
```

(2) INFORMATION FOR SEQ ID NO:161:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:161:

```
GAATTCGGCC TTCATGGCCT AATATCATGA TCACTGAAAT TACATCTAGT GAAACACACA      60
CGTGCTTATC TGCACGTGTG TGTAAGTTAG AAAGAAAAAA CAAAGGCCTA ACAGTGATTG      120
TCTTAGGTTG ATAGGATAGT GGGTGGGATT TGCAGAATTT TTGTATCTGC AGAATTTTGT      180
CAAAGTGCCC ATTAGTTTGT TAAAGAAAAA AACCTAAATG TATAACTTCT AAAGAGATAA      240
TTTTTCTTT CATGTTTGTG CTACCTATAT CTAGGAAAAT AACTTAGAAT TGTAATTATT      300
TTGAAGCTCT GGAATTATTA TGTTCAAAAA TTACAGAACC AAAAAGTCTC GAG          353
```

(2) INFORMATION FOR SEQ ID NO:162:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 469 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:162:

```

GAATTCGGCC TTCATGGCCT ACTTGCTGTG GCTGACTCGG TTATTGACTT TACTTCTTTT    60
CTTTTCAGGT TTTTATGGGA CTGTTTCTAG CCCTGATTCA GGTGTGTATG AAATGAAGAT    120
TGGCTCCATC ATCTTCCAGG TGGCTTCTGG AGATATCACG AAAGAAGAGG CAGATGTGAT    180
TGTAATTCa ACATCAAACT CATTCAATCT CAAAGCAGGG GTCTCCAAAG CAATTTTAGA    240
ATGTGCTGGA CAAAATGTAG AAAGGGAATG TTCTCAGCAA GCTCAGCAGC GCAAAAATGA    300
TTATATAATC ACCGGAGGTG GATTTTGTAG GTGCAAGAAT ATCATTTCATG TAATTGGTGG    360
AAATGATGTC AAGAGTTCAG TTTCCTCTGT TTTGCAGGAG TGTGAAAAAA AAAATTACTC    420
ATCCATTGTC CTCCAGCCA TTGGGACAGG AAATGCCAAA CAACTCGAG    469

```

(2) INFORMATION FOR SEQ ID NO:163:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:163:

```

GATTTATTCA TTCTTGATTA AATGCACTGA AAAGTAAAGG GTCTGTTTGT GTCATGTTCA    60
TGAAAATGCG GTTAGAGAGG TGCTATTCAA GTGATTCTGA AGGCACCCCA AGGTATATCT    120
GTAATTTAAA GATTACTGCA AATATCTTTA CTTTACTGTG GGTTTTTAGT ACATCTGTTA    180
ATTTAGTGTT TCTTTGTGTG TTTGTAGAC TAGTGTCTCT CCATCTTCA ACTGAGCTCG    240
AG    242

```

(2) INFORMATION FOR SEQ ID NO:164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:164:

```

GAATTCGGCC TTCATGGCCT AGCATTITTT TTCTTTAAAT TATTGTATCC ACTAGTTCTT    60
GCCAGTATAA AGGAATACAA TTGACTTTTG TGTGTTTCAT ACGCTACAAC CTTTCTAAAT    120
TCACCTATCA GGTCCAGAAC TCTTCTACTA ACAATGCACT TTTATAAAGC CCTAACACCT    180
CTCCTGATCT CTGTCTCACC CTCCCACCTA TCTCACTGTG GGATGGGAAG GAAGTCAATG    240
GAAAACACAG GAGCGCATTC TAATAATAGC CCACATGGTA TACTCGAG    288

```

(2) INFORMATION FOR SEQ ID NO:165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:165:

```

GAATTCGGCC TTCATGGCCT AGCTCGATCC AAGAAGAAAA ATTAATGA CAGCTTTTCC      60
CATTGATATA ATCATCTTAC TTTGCTCTCT ACAAGAAATA TGCATTAGGA ACCTTCATTA      120
TAGGTCCACA GAAATAGCAG AACACAAAAG CGCCCCCCTA CCCCCCGCC CCGGTAACCA      180
GAAATACACA GAGGCAGAG                                     199

```

(2) INFORMATION FOR SEQ ID NO:166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:166:

```

GAATTCGGCC TCATGGCCTA GAATTAACCA ATTAAGAATT AATAAATTAC TTATAAAATT      60
AAAAATCAGG AATACCAGGC TTAATGCATT CATTTATTCT ATTTAGCAAA CTTTTTTTTT      120
TTTTTTGAAT GCCCACAATG TCCTAGGTTC TGGAAATACA AAATTACTTG GTACCAGTAA      180
CTCGACTGTC ACCTTTCCAG CCATGGACTT GGTTCAGACA AACCCCCAGT CCACGGTTGT      240
CCTCCACTTG CAGTGCCCGC CGACTGTGGA TATATGCTGG GGATCCCAAC ACAACGCAGC      300
TACTCTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 187 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:167:

```

GAATTCGGCC TTCATGGCCT AGTAAATATT TTCTTCTACT TTGTGTTTGG CCTTTTGGT      60
TTCTCAGCAT TATTTTTTGA AGACAAAAG ATTGATTTTG AAGAAGTCTA ATTTATCAGG      120
TTTTTTCTAG TAGTTTGTAG CGGATTNTG CATGCTGCTT TAAAAAAT CTTTGCTAAC      180
CCTCGAG                                     187

```

(2) INFORMATION FOR SEQ ID NO:168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:168:

```

GAATTCTAGA CCTGCCTCGA GCCTTGCCCA GAATCAGCAA GTAACTGCA CTAATTTGTC      60
TTATATTGA CTTTCTAACA CTGATTTTTC TGATTTTCC CTGTTCCGACC CTCCAATTTA      120
TAAAAATGTG TATAATTGTT CTGCTGCTTC TGCTTTTGCC TGCTTTGGCT GCTGCATATA      180

```

CAGGTGAAGA TCTGGAAAGA AATGATGGAT CTACAGAAAA ACCCTACTTC GTAACCCCTA 240
ACCTGCATGG AATTCTGATC AAGAAGCAAC TCGAG 275

(2) INFORMATION FOR SEQ ID NO:169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:169:

GAATTCGGCC TTCATGGCCT AGTTTCACAT TGTCTGTACT GTGTTGTGCA GTACCAGAAG 60
TTGCTGGTAG CTAATTGGTC TTCTGGGACC TGCCATTGCA GACGTGGTGA TTGTAATCTT 120
AATCTTGTG AAACAGGATG GATTATGAC TGGGATGGCC GGAAGCCACA CCAGACACCC 180
AGTCACCTGG TCATGGGAGA GGTACTTTGT TGGCTTTTCA TAGTACTTAA CACTGTGAGC 240
TGCTTCCTGA AGTGGCACTC TTAAGGCCAG GTGCCCCCAC CCTCGAG 287

(2) INFORMATION FOR SEQ ID NO:170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:170:

GAATTCGGCC TTCATGGCCT AAGACAGACA TTTTGGCAG AGCATAGATG AAAATGGCAA 60
GTTCCCTGGC TTTCCTTCTG CTCAACTTTC ATGTCTCCCT CCTCTGGTC CAGCTGCTCA 120
CTCCTTGCTC AGCTCAGTTT TCTGTGCTTG GACCCTCTGG GCCCATCCTG GCCATGGTGG 180
GTGAAGACGC TGATCGCCC TGTCACCTGT TCCCGACCAT GAGTGCAGAG ACCATGGAGC 240
TGAAGTGGGT AAGTCCAGC CTAAGGCAGG TGGTGAATGT GTATGCAGAT GGAAGGAAG 300
TGGAAGACCT CGAG 314

(2) INFORMATION FOR SEQ ID NO:171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 195 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:171:

GAATTCGCCT TCATGGCCTA CACCAAGTTG AATCCCTATG CAGGAGGAGA CGGCCTTCAG 60
AACAACTGT CCCCCAAGAC AAAGGGCACT CCTGTGCACC TGGGCACCAT CGTGGGCATC 120
GTGCTGGCAG TCCTCCTCGT GCGGGCCATC ATCCTGGCTG GAATTTACAT CAATGGCCAC 180
CCCACATCCC TCGAG 195

(2) INFORMATION FOR SEQ ID NO:172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:172:

```

GAATTCGGCC TTCATGGCCT ACACCTCTGG TCATTTTGCA TTTTATCCAG CTTTTTTTCA      60
TCAACCATGT TATCCTGACA GACACATTIA TTGGATAATT AGTTGGAAAT ACCTTATGGT      120
TGGTTGCAGT TGGCTATTAT ATCTATGTAA CTTTCCTGGG ATACAGTGCA TTGCCATTTT      180
TGAAAATAC AGTAATTCTT CTGTATCCAT TGCACCTCT GATTCTGCTC AACTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:173:

```

GAATTCGGCC TTCATGGCCT AGGCTAACGT AATTGAGAAA ACCAAATGAA ATATATCTTG      60
ACCAATAATT TAAAACCATA TCAGAGATTC AGTTTGGTTC TGTCTTCTGC TTTACTGATT      120
TTAGGATCAG CCTCATACAA AAGGGTAATG GTGGCAGCAG CTCCAGAACT CATATCATAT      180
CCTCCCATGT TAAAGTCAA TGAGAAAAGT CTGTCTTCGC CCCAGGATCT CGAG      234

```

(2) INFORMATION FOR SEQ ID NO:174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:174:

```

GAATTCGGCC TTCATGGCCT ACTCAGTTCC ATTGTTAAGC AAGGAAAAAC AAACAATACA      60
TTGAATTTGA CAACCCACTG AAGTTGCAGA TAATGAGGAC TTACCATTGT ATACCATTAT      120
TCATCTGGAC CTATATGTTT CATAAGTTG ACACCATCCT ATTACAAGAA AACCTAACA      180
GTTATTTATC AAGCAAAAAG ATAGTGGGTC TGACAAAAGA TGACGGTAAA ATGCTACGTC      240
ACACCTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:175:

```

GAATTCGGCC TTCATGGCCT AAACCACTGC GCACCATATT TCTTAAGGAT GTTCTGAAGA      60
CCCATGAATG TCTGGTCAAG TCTGCTGATC TCTTAATGAG GGACAACCTG TTTGAAATAA      120
TAACAAGCTC CAGGACATTC TACGTACAGG CAGACAGTCC AGAAGACATG CACAGCTGGA      180
TTAAGGAGAT TGGCGCAGCT GTCCAGGCC TCAAGTGCCA CTAGGCCATG AAGGCCGAA      239

```

(2) INFORMATION FOR SEQ ID NO:176:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:176:

```

GAAAACCCCA GATATTCCTT ATTATGGAAG AAGAAGCAGG AAATATGTTT TTGAATAATG      60
TGGGTCAGAG AATTGTGCAT TTATTATTGC TAGGATGCAT ATACACATTG AACTCAGTCA      120
ACTTACTCTC TCTAAATTAT CTCACCGGTG GAGACATTGC CTCAGGAGTC GAGCCCTGTG      180
GTGTGCCTCC TGCTGTACC ACATTTGACC ACCTAACTGA CCCCAGTGTG GTCACCTTTG      240
CCACCAATCT CGAG                                         254

```

(2) INFORMATION FOR SEQ ID NO:177:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:177:

```

GAATTCGGCC TTGCCAGTAT TCATGCTGTT GCTTCAGTCA AGAATGAATT CCTCAGCGCT      60
ACCTCTCTTG ACCTTCACAT CTTACTTAGT GCAAATGCTG TCTCCTCTG AGACTTGCCT      120
GACTTCGGAT ACTCTCCTG TGACATCTTA TCTAAATGT CAAGTGAGAC TCGAG          175

```

(2) INFORMATION FOR SEQ ID NO:178:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:178:

```

GAATTCGGCC TTCATGGCCT AAGTGGCTGT GTGGTATTTT CTAAGTATTT TTAAATTTT      60
TCTCTCATTG ATACCCTATA AAAATGCAAC TGTTAAAGAA TTTGTCTTTC TTTCTCATT      120
TATTCTTTCC AGAGTATATA ACTAATTAT TCAGCATTCA TTCATTGAGC AGATATTTGT      180
TGAGCACTAA CTATGTTTCA GCACTGGGCA GGGATATCGG GATACCAAGA AAGCTCGAG      239

```

(2) INFORMATION FOR SEQ ID NO:179:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 236 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:179:

```

GAATTCGGCC TTCATGGCCT AGAAAATAAT TTAGAGAAAG AATAGAAAGT CATGGAAAAT      60
CTCATAGGTA GGAGACAGAA GAGAGAACAT TGTAATAAG TTTAAAAAAG ATAAGAAAAT      120
CAGGATAAAG TAGTATGGAC TCTGAGGTGG GAGAGAATTT TAAGATTAGC AGGAAAGTAG      180
TGAGTTGGT ACTTTTAGT TATTAACAAA GCACTCACTT CTTACAGAGT CTCGAG      236

```

(2) INFORMATION FOR SEQ ID NO:180:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 410 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:180:

```

GAATTCGGCC TTCATGGCCT ACGAAGATTA TAATGTATTT TTATTCTGTT TTCAGCTTCA      60
TGTTTCCTGT TGCAGGTGGG ATAAGACCCC CTCAGGCCTT GATGCCGATG CAGCAACAAG      120
GATTTCCCTAT GGTCTCTGTC ATGCAGCCTA ATATGCAAGG CATTATGGGA ATGAATTACA      180
GCTCTCAGAT GTCCCAAGGA CCTATTGCTA TGCAGGCAGG AATACCAATG GGACCAATGC      240
CAGCAGCGGG AATGCCTTAC CTAGGACAAG CACCCTTCCT GGGCATGCGT CCTCCAGGCC      300
CACAGTACAC TCCAGACATG CAGAAGCAGT TTGCCGAAGA GCAGCAGAAA CGATTTGAAC      360
AGCAGCAAAA ACTCTTAGAA GAAGAAAGAA AAAGACGCCA GTATCTCGAG      410

```

(2) INFORMATION FOR SEQ ID NO:181:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:181:

```

GAATTCGGCC TTCATGGCCT ACACATTTGC ATTGTCTGCC CATGGACTGG TTGGAGCAGA      60
AACCTCCATA CCTCAGTCTC TTGGTATTTG TCTGCCCCAA CTGCTGCTTT TTGTTGGGAT      120
GTTTGTGTGT GCTGGGGTCT CGGCAGCATC GGCTGCTTCC CGGTGCGCAC TGACATGCAC      180
TTGTTCTCCA CGATGGCTTT CTCTACCTTC TGAGATGCTC CATTATCAGT CCTGCCTTTG      240
TTCCGGAGAG TTGAGATGGT ATCACTTCTC ATCCATCCTT AGAAATACCC CTCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:182:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 272 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:182:

GAATTCGGCC TTCATGGCCT AGGGGGCTGG TAGTGAAATA TTTGGTACTG AAAGTGTGAA	60
GACCTCTGCT GGGGACTGAA CAGAGGGAGT GTCTTCTGCT GGTGGTGTGA AATCTATCTC	120
ATCATCAAAA TTATCTTCAA ATTCCTTAAA GTCTATTCTT GGTCTTAC AGCAGGATAC	180
ACAGTTTGCA ATTAACACTA TTAATATTAT TAAACTGCAC ACACACAGGA TCACAAAAGA	240
TGAGGAAACT TCTGCAGCAG GTGGCGCTCG AG	272

(2) INFORMATION FOR SEQ ID NO:183:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:183:

GAATTCGGCC TTCATGGCCT ACTACTTATC ATCCCTGCTC ACACACCCCT GTCCAAGGCT	60
TTATGCATCG GATTATTTT TCCAAATCAA GAGGACAGTG ATAGATGCAT TTCCCCCAGG	120
CTGTCTCAGA AAGGTCGCTA AATGTATACT GTTGTCAGAA TTGCTGAGAT CTCCCCCAC	180
TTTTGGTTTT TGCAGCAGTA AAAACTCTTT CCACTGTGAC TTATTTTCTC TCTCAGGCAG	240
CAGACTCGAG	250

(2) INFORMATION FOR SEQ ID NO:184:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 399 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:184:

GAATTCGGCC TTCATGGCCT AGATCTTCTC CCCATTGAGC AAAACTTTCC CATTCCGGTT	60
AATGGTTTTG ACAAGCAGGG CACCACGGGG CATAAAATTG TATCATCCAG CCTCCTTCCA	120
GCAGCTCTCT CCAGTTCTTG TCTGTGATGA TGCGTACGTT GCTCTGCCGC CTGTGGGTCC	180
AGGGAGCACC CCCAAGCAAC AGTACCAGGA CTGCCAGCGG AACTGCAAGA CTCCTGGAGG	240
GTGCCATGTC TGCCACTTGC CCACCTCACA GCAAGCGTGG CGGCCCAACA CTAGGTTTTT	300
TAAAACTGT GACTATCAGT GTTTTAAAAA TTGCCCGGTA ACTCTAGACT TCAAAAGTGG	360
GATAAGTAAT GATAAACCAA TAATAAACCC TGCCTCGAG	399

(2) INFORMATION FOR SEQ ID NO:185:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 185 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:185:

```

GAATTCGGCC AAAGAGGCCT AAAAATTAAT ATTACCTTAT GACTGCCTTT ATCATGACTC      60
TCTTAGTGGG GATTTCGTGC CTCCACATGC CCTGGGGGAT GTGCAGCCCC CGTGCACTCC      120
CCGCCTTGGC CGGCCCTTC CCCCATGCCC AGGTAGACTC TGAGCTCTTA GCCCAGCAAC      180
TCGAG                                           185

```

(2) INFORMATION FOR SEQ ID NO:186:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:186:

```

GAATTCGGCC AAAGAGGCCT AGGGAACATA TCTTAAACAC TGAACCTCTT TTCAGCAAAT      60
TGGCTTTCTA GTTTCTCAGC TCTCTCTTAA CACCTCTAAA TCTCTTTCCT GGCAAGATCA      120
TTTATTTGCC TTGGTTTATG GTGATACTCT TCATTGTTAT ACTGGTGGGT GATTGTTTTA      180
ATTCATAGCT GTTTTTTCT ACTTCAGGAA GATGACACTG CTGGCTCTGC TGGCTCTGAT      240
GTTTACCTTG TGGCTAATGC CTGTGTTTGC CTGTGTTTAC ATTTATTCCA CGATTCAATT      300
GTTAACATTT ACTAAGCTCG AG                                           322

```

(2) INFORMATION FOR SEQ ID NO:187:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:187:

```

GAATTCGGCC AAAGAGGCCT ACTCATAACA GCGTCAGAGA GAAAGAACTG ACTGAAACGT      60
TTGAGATGAA GAAAGTTCTC CTCCTGATCA CAGCCATCTT GGCAGTGGCT GTTGGTTTCC      120
CAGTCTCTCA AGACCAGGAA CGAGAAAAAA GAAGTATCAG TGACAGCGAT GAATTAGCTT      180
CAGGGTTTTT TGTGTTCCCT TACCCATATC CATTTCGCCC ACTTCCACCA ATTCCATTTC      240
CAAGATTTCC ATGGTTTAGA CGTAATTTTC CTATTCCAAT ACCTGAATCT GCCCCTACAA      300
CTCCCCACCT CGAG                                           314

```

(2) INFORMATION FOR SEQ ID NO:188:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:188:

```

GAATTCGGCC AAAGAGGCCT ATTATGCTGG TGCTGTCTAC TAATTTCAAG AAAAAGTACA      50
AGTCTGGCTA GACTCTGCTA CCGCCTAGCA CTGAGGTGTG GTCCTTTATC TGTATTACA      120
TTCTTCGTGA TAATGAAATT CTGAAACACA TGCTCCAGGC ACCTTTGTAA ATGTGAAGGT      130
GAATAAAGTA TTTGTTTGTG GTCTGAAAAG AGATCTTTGA AATGTTAAGT TGCCACAGAC      240
CCAGACCAAG GAGCCTGCTG AGAGTTTAA AGGCTCTTAT TGGATGACAG TAGATTCTTT      300
CCTTGAAATG TCTATAATGA ATATTCAAGA ATGCTCATTC TGCATGAAAT TTGCAATTTT      350
AATTATCAGT GAAAGAAAAG ATTACACAGT GCTAAATGAT TGCCATGGAA AAGTTATGGC      420
TACCTCTTGG AGTAGAGAAA ATCTCAAAGG CCGCTACTCG AG                                462

```

(2) INFORMATION FOR SEQ ID NO:189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:189:

```

GAATTCGGCC AAAGAGGCCT AGTGGGCAAC TTGGAGAAGA GTGAAAAACA CTAAGAATC      60
ATCTCTTTTC CGAGTCACAA AGTCCCATGA ACTTTGTGAC TCAGAGACAC TTTTCGTGAA      120
AATTACCTTT CGGCGGGACA CCGTCTCAGG GCAGCTTTT CAAGGCTTCG CTTGACATGA      180
TTTCCTTCCC TTCATCAGTC ACTTTGGATC CAGCTGAATA TCTCTCTCGG GTGAGAGCGG      240
ATGTGGACTG GCCTCCACA GAAGAAGAGT AGGTGGCTTT GGTGGGGGTT GGGGTGCGGG      300
CTGGCTTCCT GGTCTCGAG                                319

```

(2) INFORMATION FOR SEQ ID NO:190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:190:

```

GAATTCGGCC AAAGAGGCCT AGTGAAAAGA AAGAGACTGT NAAATAATTC TGCATATCCT      60
CAGTGGATAA TTCTGTNACC TATCTGTCAG CTATTCCATA TCAATAAAGG ACACAGCTGG      120
TAATCCAAAA GGAAGGATC TCTTGATGAA AGTGTCTGTC CATTCTTATT AAAGTCAACA      180
TACAAGATAC ACTCTTAGTG ATTTTGAAC CCATAATTAT ATTTGTCTGA TAATAATTGG      240
CACTTAACGG TTACAGAACA CTTTCACTGA TATTTTCCTT AGTGAATCTT AACACAATT      300
CTACCAGTAA TTTCTAATAT TTGCCATGAT TAGACTTTCA AAATTAGTCC ACGCACTCGA      360
G                                361

```

(2) INFORMATION FOR SEQ ID NO:191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:191:

```

GAATTCGGCC AAAGAGGCCT AAGAAACATG GCGGCCGCSA CGTTGACTTC GAAATTGTAC      60
TCCCTGCTGT TCCGCAGGAC CTCACCTTC GCCCTCACCA TCATCGTGGG CGTCATGTTC      120
TTCGAGCGCG CCTTCGATCA AGGCGGGGAC GCTATCTACG ACCACATCAA CGAGGGGAAG      180
CTGTGGAAAC ACATCAAGCA CAAGTATGAG AACAAAGTAG TCCTTGAGAG CCCCATCCA      240
GGCCAGAAGG ACCAGGTCCA CCCAGCAGCT GTTTGCCCAG AGCTGGAGCC TCAGCTTGAA      300
GATGATGCTC AAGGTACTCT TCATGGACCA CCATTGCTG TTGGCAAGAA ACGGCTTTAC      360
TTACAAAACA GTCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 175 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:192:

```

GAATTCGGCC AAAGAGGCCT ACTCTGAATT AATGCAAATT CCCGTGTGAC TGTATTTAAT      60
TATGCACAAA ATGGTGCCCT TGA CTGAGAT TTCAGTGAAG AACTTCATTT TTTTACTTTT      120
AAGTCTCCAA GTAGGAAATT CAATTAGCGT TATGAAAGAA AACTTAAAC TCGAG          175

```

(2) INFORMATION FOR SEQ ID NO:193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 700 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:193:

```

GAATTCGGCC AAAGAGGCCT AGGCAGCAAT GTTATCTGTC CTTATTCTT GCATGTTTTT      60
GGAAATTGCT TTTGCTTTTA CTTTGGTTCG TCATGGCAAT CACGTGCCTT CTCTGGTTCA      120
TTTTGCACAG ACCTGCCTAG AGCTGGAACG TTACCTCCAG AGCGAGCCCT GCTATGTTTC      180
AGCCTCAGAA ATCAAATTG ACAGCCAGGA AGATCTGTGG ACCAAAATCA TTCTGGCTCG      240
GGAGAAAAAG GAGGAATCCG AACTGAAGAT ATCTTCCAGT CCTCCAGAGG AACTCTCAT      300
CAGCCCGAGC TTTTGTACA ACTTAGAGAC CAACAGCCTG AACTCAGATG TCAGCAGCGA      360
ATCCTCTGAC AGCTCCGAGG AACTTTCTCC CACGGCCAAG TTTACCTCCG ACCCCATTGG      420
CGAAGTTTTC GTCAGCTCGG GAAAATTGAG CTCCTCTGTC ACCTCCACGC CTCCTCTTC      480
TCCGGAAC TG AGCAGGGAAC CTTCTCAACT GTGGGGTTGC GTGCCCCGGG AGTGCCTTC      540
GCCAGGGAAG GTGCGCAGCG GGACTTCGGG GAAGCCAGGT GACAAGGGAA ATGGCGATGC      600
CTCCCCGAC GGCAGGAGGA GGTGCAACG GTGCCACTT AACGGCTGCA GGAAAGTTTA      660
CACCAAAAGC TCCCACTGA AAGCACACCA ACGGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:194:

```

GAATTCGGCC AAAGAGGCCT AGAAAAATAC TTGGGCAGAA AGAAAAATATC ATCAAATAAC      60
ACCTATTCTT TTTAGCTAT AGAGATGGCT GGATATCAAA AGCACCACGG GAGCTTTGCA      120
ATTTGCTGCC TCTTTTCAGC CCTCAGCTTG ACTCTCAGTT TTCAAGAGGG AGAAAAATGAA      180
TGTTTCCCAG CATTCTCTGT CCTTTGCTCC AAAGAAGAGA GCAGGTGTTG GCTTCCAAAC      240
CTTCCGTATT TTCTTATTGC TGTTAGGGGG ATCAACTGCA TGTTCCTGA GGGAAAAGGG      300
TGGCTCACTG ACCTACTTGA AGGCATTCTC TCAGTGGGAG CTGGGCAAGA GAATCCAGGG      360
ATTTCTTTTG CAGGTTTCG CGCAGTGCCC CTGCCATCAA GCTGCCTAAA ATGTGAATAT      420
TGCTTCCCTG CGTTTCAGAG GTGGCCGCTC GAG                                     453

```

(2) INFORMATION FOR SEQ ID NO:195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:195:

```

GAATTCGGCC AAAGAGGCCT ACAAATGTG AATGGAACAA ACCTGCACGT GTACCCTTGG      60
ATGTGTGGAT GTTCTTTGTT TTTATTTGTT AAACCTGATG TCTGTCTGT ATGACACATT      120
TATTGGAAC GTTTTTCCC TATTCTGTGT CTTGTATTTT ATTTCTCGT GTTCTCCAAA      180
GAGCAGATAT TTAAATTTT TATATAAATC CAGTTTGTC ACATTTTAA AGGGTTCATG      240
CTTTTGTAT CCTATTCAG AAAACTTTGG CTACTTCAAG GTCACAAAGA TTTTGGATT      300
GTTTAAATCT ACAAGTTTGA TAGCTTTGAC TTTATATAT AAGTCTGATT CATTGGAGT      360
TAATTTTGT GTACAGTGTC AATTAAGGGT CTAGGTTTCT TATTTTCTT ATGAATATCC      420
AATGGTTCCT CGAG                                     434

```

(2) INFORMATION FOR SEQ ID NO:196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:196:

```

GAATTCGGCC AAAGAGGCCT ACAAACACAG AACATTCCA TCGTTGCAGA GAGTACTATT      60
AGAGAGCAGT ATTCCAGAGC CTGTGATCTT AATCACTACA CCTAAGCCT CCCAGTTGAC      120
AAAGTTACCA CCTTTTTTTG GTGTGTGTGC ACGTGCGTGT GTGTGTGTGT AAGTATATAT      180
AATTTAAATC ATTCCATTAA ATTTACCTCT GAAATTCAAA AGACTGAAAC AGATCTTCTT      240
TTTATCAAAT AAGTTGATTG CAGAGATTAT ATTGGTGTTT ACATTCAGG CAACCTGCTC      300
ATGAAATTAT CCATTGCTCT CGAG                                     324

```

(2) INFORMATION FOR SEQ ID NO:197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:197:

GAATTCGGCC AAAGAGGCCT ACTCCTCCGC CTGCAACCAT TGTTCCTAC CACTGGATTA	60
TTCTGAAGCA AATTTTAGAC ATCATATATA TTTATCTCTG AAAGAGGACT CTTAAAAACA	120
TGCACTTATA CCTCTATTAC ACTGACAAAA TTGGTAACAA TTCCTTTATA TTATCAAATT	180
TCCTTATTGA GTTCCTGATG TTCAAATTC TGATTCTCCA GATGCTCCAA ACTTCCAGAA	240
ACACAGATTC CCAGATGGAA TCCTGGGGAA GGCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 448 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:198:

GAATTCGGCC AAAGAGGCCT ATTTTCTAAT AAAAATATT TTATGGTAGG TTTGTGGAT	60
TATTGAATAC AATCTGGCAT TCTGTTTAAT ATGTATGTTT TCCTGAATGA GGGGGTACAT	120
TGTAATTTTA ATTATTAAC TCACAATGTT TTTGTTTAA AAAATAAAAA TTTTAGGAGC	180
AAGCAGTGTT CCTGCCTTCT TTTCTGAAGA TGATTCTCAA TCGAATGACT CAAGTGATTC	240
TGATAGCAGT AGTAGTCAGA GTGACGACAT AGAACAGGAG ACCTTTATGC TTGATGAGCC	300
ATTAGAAAGA ACCACAAATA GCTCCCATGC CAATGGTGCT GCCCAAGCTC CCCGTTCAAT	360
GCAGTGGGCT GTCCGCAACA CCCAGCATCA GCGAGCAGCC AGTACAGCCC CTTCCAGTAC	420
ATCTACACCA GCAGCACTCC ACCTCGAG	448

(2) INFORMATION FOR SEQ ID NO:199:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 187 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:199:

GAATTCGGCC AAAGAGGCCT AACTTTTGTA ATTTGAATTG GGTCCCGCTT AGTTCTTGAA	60
TTGTTATGAA AATCCTATAT CTGTTTGAT ATTTGCAAAC CCTTTGTATT ATAATTGTTG	120
ATATTTTCCC TTTTAAAAA ATACCATTGA AATCAGCATG ACAAATAA CACTGTGGGC	180
ACTCGAG	187

(2) INFORMATION FOR SEQ ID NO:200:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:200:

```

GAATTCGGCC AAAGAGGCCT AGACCAGAAT AAGCCTTTTA AGGTAAACCT CAAAATTATC      60
ATTTTATGGT AATACTGACC ATTTTAGTCC CCTAGGTTTG ACATGGGAGA TAGTGACTAC      120
ACTGGTGCTC GACTTTTTTC CTAGAGATTT CTCCTGAAA AATACAAGGG CTGTTGGTGA      180
GAGCAGACTT GAGGTGATGA TAGTTGGCCT CTGGTCTACA AAGATTTCAT AACTCCTTGG      240
AAAGCTTCTT ATAATCATT TTAACCTCTT GGTAGCTAGA AATTTAGAGT AGTTGAAATC      300
TTTAGGAATG AACTTCTGAG GGCCAAAAAA TGTGACTGAC AACTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:201:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:201:

```

GAATTCGGCC TTCATGGCCT ACATCACCAA TTCGGCTGGG TAAGGGTCCC CATGAAGCGG      60
CAGCCGGGTA TAGAGGTGCA GGGGAGAGCA GCCTGGGGAG TCCCTATCTG GATAGGCTCC      120
AGCCTGGGTC GGGGCGGTCC TGGTGCCCGG TGAAGCGTCA AAAGAGGGAG CCTGAGCGGG      180
GCAACGCAGA AGGGTGGAGA GGAGGGGGTG GCGAGGGCGG GCAGCGAGGC CTGGAGCCGC      240
CAGGAGAGGG GCGGGGGGCG GCCCTTCTCC AGGAATTTC GGGGATCGTG TTACAGCGTT      300
GGCGGAGCCC GAGCGGAGTG GGACTCGAG      329

```

(2) INFORMATION FOR SEQ ID NO:202:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:202:

```

GAATTCGGCC TTCATGGCCT AGAAAGGGGA GGAACGTGA CAGGCAGGTG TGGGATAGGG      60
ACTTCTCTTC CGGTCAGAGC AAGGGTCGTC CGAAACCAAA ACAACCCTCT TCCCTTCATC      120
TCGCCCCGGA TCCAAAGTCT TGGGGCTAGG CTGGGGCGGG AGTGGCACGG AGATGTAGGA      180
ACACTGCCTT TCGTTACTTC TCCTGCCATG GCTGACCTTT TTGTCTCTTG TTTCATGGTT      240
TTACACGTAT GAATGGCTTG AGACTGAGGA TTAGGGAAG AAGCGAAGGC ATCATCTAGG      300
GCTGTGCTGT GCCAAGTTGA GCAGTTGTTT AAAGTGTAG AATTTTGAC TGGTGTAATA      360
ACCCTCTATG CTCGAG      376

```

(2) INFORMATION FOR SEQ ID NO:203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:203:

```

GAATTCGGCC TTCAAGGCCT ACGTGAAACC CCATCGGCTT CATTGGCTCC TTGATTAAA      60

```

```

CCACGCCCGG CTNTCTGCCC TCTTTGATGC TGCTGGGCCA GGTGCCCCAG CCATATCCCA 120
GCCCCGTCTG CAGGGAGCCG GAGGCNGCTG CTGCTGCTAT TGTGTGGATG CCSCGCGTGT 180
CTTCTCTTCT TTCCAGAGAT GGCTAACAGG GGCCCCGAGCT ATGGCTTAAG CCGAGAGGTG 240
CAGGAGAAGA TCGAGCAGAA GATCTCGAG 269

```

(2) INFORMATION FOR SEQ ID NO:204:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 197 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:204:

```

GAATTCGGCC TTCATGGCCT AGATGTGTG AACCTTATTC TTGTACATTC ATTCAATCAA 60
GGCAAACCTT TATAATTTT CTTTGTTC CAATGACCTT GAAATGTTAT AGCATGGTAA 120
TATTCTATGC AACTATAGTT ATACTTTTGT GTTGACACT GTATTTTTC ACATTGATT 180
ACTGGTTGAG GCTCGAG 197

```

(2) INFORMATION FOR SEQ ID NO:205:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 396 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:205:

```

GAATTCGGCC TTCATGGCCT AGCAAGACCT TTAAAGTATA TACTCTGAAA GTGTGGCTAA 60
TATGATCATG ATGCTGTAGG AAAAAAGGT TATATGTCCA AGTGATGTA CTGTAAATG 120
TGCCTAAAGA AACCTGGAAG GATACACAGG TCTTCCCTGG GGTACAAGAC GGAGAAGTGG 180
GATCATCATC TTAACCTAC TCTTCTTT TACTCTCTG TCCTCTTAGA GACTTTTGCC 240
TGTATACATG GATTACTGTT ACTTAGCAGG GCGACCGGT TGGCCAAAGC CTTGGTGTGC 300
CCTTGGCACA ATTCTGCCA GACCCTTACC CTCTCCTCTC CTCANGGCTC CCTTAACCCC 360
TCTCCCCACA TCTGGAAGC CTTGGATACA TTTTCT 396

```

(2) INFORMATION FOR SEQ ID NO:206:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 318 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:206:

```

GAATTCGGCC TTCATGGCCT AGGAAGAGGT TGAGAAGACT CCTGGGCTTC AGCCTCTCCC 60
ACCCAGCCCT GCCCCTCACC TGCCTGCCCT CCCCTCCCC ACTCTATACT AGGGACTGGA 120
TCTCAGCCTC TGATCAGTTT CACAAAGTTT GTTCCCTAAG GAAATCAAT CCCATTGTCA 180
CCTAACTCTG AAGATCTAAA TAGCCCTTGG ATCAGTACGG GAACCCCAA TCCACAGGG 240
CCAGATGTGG AGTCTGTGTC TGCCCCGCTC TTCTCTCCAT CCTCAAAGCC CCCACTTCTC 300

```

TCCAGGCTGC TTCTCGAG

318

(2) INFORMATION FOR SEQ ID NO:207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:207:

```

GAATTCTAGA TCCTGCCCTC GGAACAATGG GACTCGGCGC GCGAGGTGCT TGGGCCGCGC      60
TGCTCCTGGG GACGCTGCAG GTGCTAGCGC TGCTGGGGGC CGCCCATGAA AGCGCAGCCA      120
TGGCGGCATC TGCAACATA GAGAATTCTG GGCTTCCACA CAACTCCAGT GCTAACTCAA      180
CAGAGACTCT CCAACATGTG CCTTCTGACC ATACAAATGA AACTTCCAAC AGTACTGTGA      240
AACCACCAAC TTCAGTTGCC TCAGACTCCA GTAATACAAC GGTACCACC CTCGAG      296

```

(2) INFORMATION FOR SEQ ID NO:208:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:208:

```

GAATTCGGCC TTCATGGCCT AGTCTCTTGA AAAGCCGCAT TTCCAGGCGC TTGGCCAGTG      60
GCCTGGGAAG TAGCCTGTGC TTGTATTGAG ACAGTCCCCC AGCAGCAAAC CATGTTCCAG      120
TCATTCCTT TCCTACTTTG GGGATTGTTG CCTTTCTGTC TTGTTTAAAG TAAACAAGC      180
ATGTACTTGT TTGTATGTAT GTATGTATGT AGTTGTACGG TGGGCACAAA TAAAAAGAGG      240
GCTGTATCCA AATAATCAT TTCTGGCTGC TCACTGGCAC AGTCCCTTTC CTCGTCGCC      300
TCCTGGCTCG AG                                     312

```

(2) INFORMATION FOR SEQ ID NO:209:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:209:

```

GAATTCGGCC TTCATGGCCT AGGCAGCGTT TCACCGCTGT GGAGGACCAG TATTACTGCG      60
TGGATTGCTA CAAGAACTTT GTGGCCAAGA AGTGTGCTGG ATGCAAGAAC CCCATCACTG      120
GGAAAAGGAC TGTGTCAAGA GTGAGCCACC CAGTCTCTAA AGCTAGGAAG CCCCAGTGT      180
GCCACGGGAA ACGCTTGCCT CTCACCCTGT TTCCAGCGC CAACCTCCGG GGCAGGCATC      240
CGGGTGGAGA GAGGACTTGT CCCTCGTGGG TGGTGGTTCT TTATAGAAAA AATCGAAGCT      300
TAGCAGCTCC TCGAG                                     315

```

(2) INFORMATION FOR SEQ ID NO:210:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:210:

```

GAATTCGGCC AAAGAGGCCT AGGAAGATGG CGAAGGTCTC AGAGCTTTAC GATGTCACTT      60
GGGAAGAAAT GAGAGATAAA ATGAGAAAAT GGAGAGAAGA AAACCTAAGA AATAGTGAGC      120
AAATTGTGGA AGTTGGAGAA GAATTAATTA ATGAATATGC TTCTAAGCTG GGAGATGATA      180
TTTGGATCAT ATATGAACAG GTGATGATTG CAGCACTAGA CTATGGTCGG GATGACTTGG      240
CATTGTTTTG TCTCAAGAG CTGAGAAGAC AGTTCCTTGG CAGTCACAGA GTCAAGCGAT      300
TAACAGGCAT GAGATTGAA GCCATGGAAA GATATGATGA TGCTATACAG CTATATGATA      360
GGATTTTACA AGAAGATCCA ACTAACACTG CTGCAAGAAA GCGTAAGATT GCCATTCGAA      420
AAGCCAGGG GAAAAATGTG GAGGCCATTG GGGAGCTGAA TGAGTATCTG GAACAATTTG      480
TTGGAGACCA AGAAGCCTGG CATGAACCTG CACTCGAG                                518

```

(2) INFORMATION FOR SEQ ID NO:211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 409 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:211:

```

GAATTCGGCC AAAGAGGCCT AATGAATTT CATTCCTTT GTAGACTAAT GTTACAATAA      60
ATAAATGGGA ATTTTAAATA CCTGCATGTT CTGTTTTTCT CTTTTTCTT TTTTCAGCCA      120
TAATGAAAGG AAAGTGACCT GCAAACATCC AGTCACAGGA CAACCATCAC AGGACAATTG      180
TATTTTGTGA GTGAATGAAC AGACTGTTGC AACCATGACA TCTGAAGAAA AGAAGGAACG      240
GCCAATAAGT ATGATAAATG AAGCTTCTAA CTATAACGTG ACTTCAGATT ATGCAGTGCA      300
TCCAATGAGC CCTGTAGGCA GAACTTCACG AGCTTCAAAA AAAGTTCATA ATTTTGAAAA      360
GAGGTCAAA TCAATTAAAA GGAATCTTAA TGCACCGGGC GATCTCGAG                                409

```

(2) INFORMATION FOR SEQ ID NO:212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:212:

```

GAATTCGGCC AAAGAGGCCT AGTACAGTCC CAATCAAGAA GCCTTATTAA CCTTCTGTGT      60
GAGGGACTAG ACTCAGTGTT GGGTTTGGAG GATCCACTGG TGAGGAGCAT TCAGTCTAGC      120
AGGAGAAATG TCAGATTAT TTATTACACA ACAAGATCTG ATGCATTAG ATGTACTTAC      180
AGGTCTAGGA ACTGTTTCTG GGAGCACAAA TGAATGAGAG AGAGAGGGAG AGAGGGAGAT      240
TGAGTGAGTT AGAGAGTTCT TGGTGCTCCA CAAGGAGCAG TAAAGTATTT TAAAAATAAA      300
AAATAATAAG GCTGACTCTG TGTCTGCTCT AGGGGTTGGC CATGCTCCAC AAAAAGCAGT      360
AAAGTGTGTT TTGTTTTGTT TCGTTTTTTT TTAAAGACA GACGTCTCGA G                                411

```

(2) INFORMATION FOR SEQ ID NO:213:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 339 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:213:

```
GAATTCNGCC AAAGAGGCCT AGTTTATCT TCTTACCTAT TTACTGAATG CNACATTACT      60
GCACACCAAG ACAAAGAGC TCTCCAGGAA AACATTGGAT ATATTGAGAG CATTAAAAGA      120
TACTGCAAAA GCTCTAATAA ATTCAGTCTG CTTATTTTCC AAATTTTATA AACTACATAC      180
TTAGGAAACT GTGCTTTCAG TGAGCTAAAC TTCTTTTTTT AAGTAACTAT CATAGTTTAA      240
AGAAAAACAT TTTAAGAAGA CAAAAGTAT TTATTAAGCC CATCTAAAAG GCTAATGCAA      300
ATTCCCAAAA AAGGAGCACA TAGAGATAGG CATCTCGAG                               339
```

(2) INFORMATION FOR SEQ ID NO:214:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 204 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:214:

```
GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCCT CGAGACACTA GCCCTTTTTT      60
CTGTTGGTTT AGCACAATAA CTTCCCTCCT CCGGCACCTC CAAACCTACC CCACAGTCAG      120
TGTAATTGTT TTATATATAT TTAATCTTAT TCAATGGAAA CCATGCCTTT GTCGTTTTAT      180
ACTTTGCTAG GTAGACTTCT CGAG                               204
```

(2) INFORMATION FOR SEQ ID NO:215:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:215:

```
CTCGAGAGGC GCATCTTAC TGGCATATGA CAGGCTGTCA CTGCAGCTAA TGTGGGTACA      60
GTTTTTCCAA AGACCTACTG ATGCATCTAC CGTATTGGAA ACCAACCAGA CATTGGCAAT      120
GGTGCTAACA AATAGCATAA TAACAGTAGC GATGTGGACC ACAAAGATAC CAGCCAGCAA      180
TACCAACATG TTGGCTCTTT TTTTCTTGGT AACTGTGAG CAAAGAGAGT TCTGAAGGGT      240
CCCAGCGACA GAGGCACTCG AGGCAGTCT AGAATTCAAT TAGGCCTCTT TGGCCGAATT      300
C                               301
```

(2) INFORMATION FOR SEQ ID NO:216:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:216:

GAATTCGGCC AAAGAGGCCT AAAATATTTG AGTCTAACT TATAAATTT GCATTCTCCC	60
TAACGAAAAA ATTTCTATTA CTGTGGTGGA TTTCTTTAAA TTTTGAATAT AGTTACTGAA	120
ATATTAAATC TTTCATTAA ATTTATATTT ACTCACTGGT TCCTTCCCCT TCTTTAAGGA	180
GACAGAAAC ATTAACACTT TTTAACCTCT CATTTGTTTA AAAATTTATT GACCTCTCCT	240
CTGAGACAGT TTGTATTCCT AGATCTCTT AAACATAAAT ATGCTTATTT TCAAGTTT	300
GTCACAGTAT TCACTCGAG	319

(2) INFORMATION FOR SEQ ID NO:217:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 278 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:217:

GAATTCGGCC AANGAGGCCT ATTTAGATT AACCCAGTT GTAGACATT GCATAGATCA	60
AGCAAACTA GAAGAGTTTG AAGAGAAAGC ATCAGAACTT TACAAGAAAT TTGAAAAAGA	120
GTTTACCGAC CACCAAGAAA CTCAGGCTGA ATTGCAGAAA AAAGAGGCCAA AGATTAATGA	180
GCTTCAAGCA GAGCTACAAG CTTTAAAGTC TCAGTTTGGT GCCTTGCCAG CTGATTGTAA	240
TATTCCTTTG CCTCCCTCTA AAGAAGGTGG AACTCGAG	278

(2) INFORMATION FOR SEQ ID NO:218:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 298 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:218:

GAATTCGGCC AAAGAGGCCT ACCTGGCTCA TTTATAACCT CCTCGATCCT ATTACTGATT	60
TGCATTCTTA ACTACAGGTA AGAGAAAACC AGTGCAACCT AGCTTTCAAT AGACAGGAAT	120
TTGCTGGCTC ATATAAATGA GACATCCAAT AAAGAAGAAA AGTTGGAAAA AATGTGTCAA	180
ATGTAGCATC CTCTCTCTCT CTTCTCTCT CTCTCTGTTT TTTCACCTAG GCTTGTGCCA	240
TAAACCTGCT TCTACATCAG TTAGTGTGGT TATGGGCGTC TTGTGGCTG AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:219:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 251 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:219:

```

GAATTCGGCC AAAGAGGCCT ACTTAGCAGA ATATATTCTT TAATAGCTCC CATAAAGCAA      60
ACAAACCCAA AATAATTCTT CCTGACCCTA CATTCACTTC CAACTATCAC CCTACATCTA      120
CATTCTCCTT TTCAACCAA ACTTTTCCA AGCAGTTGTC TATATTATG TCTCCACTTC      180
TTTACCTCCT ATTCTTGCTT CAGTATGCTT CAGTTGAGCT TCGTCCCCCT GTAGTCCACC      240
ACCAACTCGA G                                                                251

```

(2) INFORMATION FOR SEQ ID NO:220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:220:

```

GAATTCGGCC AAAGAGGCCT AGATTGATTC TGTGTTGTGG TATTGGCCCT TACATACAAC      60
TGGAGGAAGT GTGAATTCA TCATGTTGAT AAATTGGACT GTCATGATTC TTTATAATTA      120
CTTCAATGCC ATGTTTGTG GTCCGGGCTT TGTCCTCTG GGGTGGAAAC CGATGTGTGA      180
TGAAGATGGA CCATCACTGT CCTTGATCA ACAACTGTTG TGGTTACCAA AATCATGCTT      240
CGTTCACACT GTTCTCCTT TTAGCACCAC TGGGTTGTAT CCATGCTGCT TTCATTTTGG      300
TGATGACTAT GTACACACAG CTTTATCATC GGCTCTCCTT TGGGTGGAAC ACAGTGAAGA      360
TCGACATGAG TGCAGCAGCC TCGAG                                              385

```

(2) INFORMATION FOR SEQ ID NO:221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:221:

```

GAATTCGGCC AAAGAGGCNT ACCCGATTA TAGTTTTTGT ATTGTTTTTA CAATTTTTGT      60
GAATTAGGAT CCAAATAAGG TCTGTAAATA TTACATTGGG TTTAGGTAAT CGATACTTTT      120
TTTCTTTTAA TCTATAAGTT TTCTCTATC TTTTATTGT GGTATTATCC ATACAATTGG      180
TTTGTGAAG AAGCCAGGTC TTGCCCCTAT AATACTTCTC AGAATCTAGA TTGTGTTGAT      240
GAGATCCCAG TGGTTTCATG TAATATGTTT TTTGTCCTT TGTATTTTCT GTAAATTTTG      300
TTTATTTTAT TTTTATTAT TCTATTATTT GAGATGGAGT CTTGCACTGT CACCCAGGCT      360
AGAGTACAGT GGCATGATCT CAACTACCG CAACCTCGAG                                400

```

(2) INFORMATION FOR SEQ ID NO:222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:222:

```

GAATTCGGCC AAAGAGGCCT AAGAGCCTAT AAGGTTTACA TATTTCACTG GAGAGAGAAA      60
TAGGGACATA CAATAAATGA TTTTATAATA AATTTCCATG AAAAGTGAAT CTGAAAACCC      120
CACCGGAAGG CAGAGTAGTG CAGCCAAAGG AGCATGAATT GTGGAATCAT ACAGCTCTAG      180
GTTTCAGATCC TACCTTTACC ACTTGATAGC TAGGCAGACT TCAACAAGTT AGTCTAATTT      240
GAGCTTCAGT TCTCTCATCT GTGAAAAAGA GAAAATACAG CCACTTTATA ACATTATTTT      300
AGATGCCATA AGGTAGGTAA AGTGCCAGAC ACATAGATTG AAAAACTCA ATAAAAATAGG      360
AAGGCTGGAA TTTCCAAAT TTTTCTTGC TTTCACAATC TGGGTTCTAA ATTTATTATT      420
ACTCTACCCA TCACTTCCTC CTTCTCCCTC CACAACCTCA CTATAAGCCC AACATCTCGA      480
G                                                                                   481

```

(2) INFORMATION FOR SEQ ID NO:223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 401 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:223:

```

GAATTCGGCC AAAGAGGCCT AGTGTGATGT AGAGGTCTCA GCATTTCTCT TAGTATTTGA      60
CTGTATTAGT TTTACATATT TCTTCTTTTG TTTAGAGTAT AACCGCTTCT TACATTTCTT      120
TCAGTCCGTT TCTAAGAAG AAATTAATCT TTTTAGAAAT CCTGGCAGTT ACCCGGCAAT      180
TGATGTTTTG GTGGAAAATT AGAGCACACC AGTTTGTCAT AACTTTAAGA AACATTTTCA      240
CTTTATTGAT ATTCTGAGGA TTTTAGTGAT TTGGGTAATT TGGGTCTAAT AAAGAGTAAA      300
TTGTTGAATA CTCATTGTT TTGAGTCATC TATATTTTAA AACCCCTTCT TTAGTTGTTT      360
TTTCATCCCT AATACAAATG CAACTTTCCT ACTTGCTCGA G                                                                                   401

```

(2) INFORMATION FOR SEQ ID NO:224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 465 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:224:

```

GAATTCGGCC AAAGAGGCCT AAAGTATGT CTTCCATTG CTGGATAGGA CATGCTGACT      60
GATGACCTCA CAGACTGTTT TTATGCCCTC ACTACTCACC TCACCACCTA CAGTCATAGG      120
CTGACTAGGA GTTGGTTGTG TACATTCCTA AACCTTTTGT CCCTCTTTAT TTGTCTTTCT      180
AAGTGTGTAT TCAGTACTAT GTAAATTGAT AAAACATGAG TGTGAAAATA TTTTCTTTTG      240
CTATAAAAT GTAAATTGAA TTCTTTGGG AAGAGCTGAT AAAATATGTC ACTTAAAGAT      300
CTTGTTAAAT TAGATGAGGG AGATATAGAT GACAGAAACT CTTTCAACAA ATATCTAAAT      360
AGATGTGCCA CTCCAATTAT TTTGTGAGTG TCTTCAAGTT TTTGTCCCAC TTTAAAGAAA      420
ACCAACTGG CCATCATAGC CAATGAATTA TGCAGGAGTC TCGAG                                                                                   465

```

(2) INFORMATION FOR SEQ ID NO:225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:225:

```

GAATTCGGCC AAAGAGGCCT ACACATTATA TTAGATTTC TAGAACTGT TGGAAATATC      60
TAGCACATGT GCTTTATCCC ACAATAATTA CATAGAAAAT TAAAAAGAAT TAATCTAAT      120
GTAACCATCT TTTTACTTGA CTTTTTTTTT TTTTGCTCTG CTCACAGGTC TAATTGTTGT      180
TATTCTCACT TTATTTTCTT ATAAGGTAGG AATAATATCC ACTTCATTAG CTCATCATGA      240
GGGATAAGTA GGATTGGAAA AGATACTTTC AAAGGGCACC TAACTGTGAA GAAGATGCCT      300
TCATTGTCAT TTCTTCTTGC GCACATTCTT TGTATCCAG TCATTCAATTA GGACTCCATG      360
TTTATTGAAC ACCTACTCTG TGCCAGGCAC TTTTCTCTGT TCTGAAATA TCACCATGTA      420
AAAACAAATA GCTGAAGAAT GCCCTGCCCT CATAGAGCTT ACAGACATAG AGCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:226:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 265 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:226:

```

GAATTCGGCC AAAGAGGCCT AGCGTTTCTG ACTTTATTAC TGGTAATTTA TTGCACAGGT      60
TTTTCTGCAT CAAAAAAGTA TCTGCTAAAA TAGAGAAAGT TGTGTCTGAA TTCACATTTC      120
CCCCCAACTT CTAATAATAT TTCCCCTAAA AAAGAATCCA CTCATCTAAT TTAAAGAAA      180
ATATACTTCT TACACAAGAC AATCCAAACT GATGCAAAAT ATTTATTCCA AGTTAGTTAT      240
TTTATGCAGT AGTTTCCCCC TCGAG      265

```

(2) INFORMATION FOR SEQ ID NO:227:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 238 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:227:

```

GAATTCGGCC AAAGAGAGAA ATTTTAATCT TGAAAGACTT TTCAGGTAT CTCATTTTTT      60
AGGTGGGGGT GGCAGGTGTA TTTCTTTTTT AACAAATAAA AGGCATTTAA GTAAAACTAA      120
AATGAAAAAA GTAGGCCTTC TGACATTGTG TACTTGGTGG TTCTGTCCCT CTGCCTGTAA      180
CAAATCTCAT TTTTGTACC AAGAACTGTA TGAAAGAAGT AAATCCACCC CTCTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:228:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 493 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:228:

```

GAATTCGGCC AAAGAGGCCT ATGCCTGTGT TGGGTGACA GTGAGGGTAA TAATGACTTG      60
TTGGTTGATT GTAGATATTG GGCTGTTAAT TGGTGTGTA GAATATTTGA GCACAGGTGG      120
AGTAGAAACA AATCACAAG ACTTTAAGGA GTTGAGGTAT AATGAAAGTC TCACAAACTT      180
CAGCTGTCAT GGAAGAATG GAACCACCAA TGGAAGGATC ACTCATGGTT TCAAGTTACA      240
GAGTGCCTAT GAGAGTGGCC TGATGCCTTA CACGAATTAC ACATTTGATT TCAAGGGTAT      300
AATAGACTAC ATTTTCTATT CTAAACCTCA GCTGAACACC TTAGGCATCC TGGGCCCTCT      360
GGACCACCAC TGGCTGGTTG AGAATAACAT CAGTGGCTGC CCGCACCCCTC TCATCCCCTC      420
TGACCACTTC TCACTTTTTG CACAACCTGA GCTCTTACTG CCTTTCCTGC CCCAAGTCAA      480
CGGCATTCTC GAG                                         493

```

(2) INFORMATION FOR SEQ ID NO:229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 572 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:229:

```

GAATTCGGCC AAAGAGGCCT AAGAAATCAA AATTAAAGCA ATCAAATAAT ACTCACATTT      60
ATATAAGAAA TACTTCAATT TACTTCCAA TGAGTAAAGT TTTATATTTA ATGTTTTAAT      120
ATTTTCATATT TTAGTTTCTT GCAATTATTT ACTTTTCTA AAACCTACTT AAATTAGGTT      180
TAAAGTCTA CTATATATAA TTTGAAATTT TATTCAGTTT GCCTACAGGT GTGTTTTAAC      240
CACTGTGTAC ATAGTATTTA ACGGTCTGCT TTTTTTTTT TAATATGGT TCATGNTGA      300
ACATCTGTAT GTTCATACTT TTCTTGACAA AGTCTAAAG GTTACTGTGT TGAAGCATAC      360
TGAACGATTA CTGATAATTT CTATTTTGAG GAACAGGTAT GTCAGTTCTT TCTCTCTGTT      420
TGATAATTCT CTCTTTTCCC CTTAGGAATC CAAAAATCCT TGTGGAGTGT CTTACTCCTG      480
ATTTTCGAGG TGATCTCAAA GCAATAGAAA AAGTTGCTCT GTCAGGATTA GATGTGTATG      540
CACATAATGT AGAAACAGTC CCATTGCTCG AG                                         572

```

(2) INFORMATION FOR SEQ ID NO:230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 193 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:230:

```

GAATTCGGCC TTCATGGCCT ATCGAGATAC GCTTTCGGCG ACCAGGTACG CCTGGTGTTT      60
CTTTGTGTTT TTTTCGATTG TTTTGGGGA GTGCGGGGAG TCACAGTTAG AAGGCGGCCG      120
GGTGTGCTG GAGGAAAGTG CTGAGGTCCA GAGCGTAGTC CGAGGGCTCC GAAGTCAGAT      180
TAAAGGGCTC GAG                                         193

```

(2) INFORMATION FOR SEQ ID NO:231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 608 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:231:

```

GAATTCGGCC TTCATGGCCT ACATAATGAT GCTGCCTCAA AACTCGTGGC ATATTGATT      60
TGGAAGATGC TGCTGTCATC AGAACCTTTT CTCTGCTGTG GTAACCTGCA TCCTGCTCCT      120
GAATTCCTGC TTTCTCATCA GCAGTTTAA TGGAACAGAT TTGGAGTTGA GGCTGGTCAA      180
TGGAGACGGT CCCTGCTCTG GGACAGTGA GGTGAAATTC CAGGGACAGT GGGGGACTGT      240
GTGTGATGAT GGGTGAACA CTACTGCCTC AACTGTCGTG TGCAAACAGC TTGGATGTCC      300
ATTTTCTTT CGCCATGTTT CGTTTGGAC AAGCCGTGAC TAGACATGGA AAAATTGGC      360
TTGATGATGT TTCCTGTTAT GGAATGAGT CAGCTCTCTG GGAATGTCAA CACCGGAAT      420
GGGGAAGCCA TAACTGTTAT CATGGAGAAG ATGTTGGTGT GAACTGTTAT GGTGAAGCCA      480
ATCTGGGTTT GAGGCTAGTG GATGGAACA ACTCCTGTTC AGGGAGAGTG GAGGTGAAAT      540
TCCAAGAAAG GTGGGGGACT ATATGTGATG ATGGGTGGAA CTTGAATACT GCTGCCGTTA      600
TACTCGAG                                         608

```

(2) INFORMATION FOR SEQ ID NO:232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 518 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:232:

```

GAATTCGGCC TTCATGCCT ACAGCGCTGC CTTTCCTTAT GAAGAAGACA CAAACTTGGA      60
TTCTCACTTG CATTATCTT CAGCTGCTCC TATTTAATCC TTTCGTCAA ACTGAAGGA      120
TCTGCAGGAA TCGTGTGACT AATAATGTAA AAGACGTAC TAAATTGGTG GCARATCTTC      180
CAAAAGACTA CATGATAACC CTCAAATATG TCCCCGGGAT GGATGTTTG CCAAGTCATT      240
GTTGGATAAG CGAGATGGTA GTACAATTGT CAGACAGCTT GACTGATCTT CTGGACAAGT      300
TTTCAAATAT TTCTGAAGGC TTGAGTAATT ATTCCATCAT AGACAACTT GTGAATATAG      360
TGGATGACCT TGTGGAGTGC GTGAAAGAAA ACTCATCTAA GGATCTAAAA AAATCATTCA      420
AGAGCCCAGA ACCCAGGCTC TTTACTCCTG AAGAATTCTT TAGAATTTT AATAGATCCA      480
TTGATGCCTT CAAGGACTTT GTAGTGGCAA ATCTCGAG                                         518

```

(2) INFORMATION FOR SEQ ID NO:233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:233:

```

GAATTCGGCC TTCATGGCCT ACCTTGATAC ATCAGCTGAC CTCATTTCCG GATACCTTTT      60
CCCCCCGAA AAGTACAACA TCTGGCCCGC CCCAGCCCGA AGACAGATCG TCCTCCCTG      120
GACAATCAGA CGAATTCTCC CCCCCCCGC AAAAAAAG CCATCCCCC GCTCTGCCCC      180
GTCGCACATT CGGCCCCCGC GACTCGGCCA GAGCGGCGCT GGCAGAGGAG TGTCCGGCAG      240
GAGGGCCAAC GCCCGCTGTT CGGTTTGC GA CACGAGCAG GGAGGTGGGC GGCAGCGTCG      300
CCGGCTTCCA GACACCAATG GGAATCCCAA TGGGGAAGTC GATGCTGGTG CTTCTCACCT      360
TCTTGGCCTT CGCCTCGTGC TGCATTGCTG CTTACCGCCC CAGTGAGACC CTGTGTCTCG      420
AG                                         422

```

(2) INFORMATION FOR SEQ ID NO:234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:234:

```

GAATTCGGCC TTCATGGCCT AAGAGATTAA GTGATTACT CAAGGTCATA TTCCTTGGAA      60
GTAGCAAAAC TTCTGGACCA GATTTCTGAT TCCAAAGGCG GTACTGCTTG TACAACACTC      120
TGAGAAGTAA TTACTGTGGA GCAAAGCAAA AAGAAGTCTA AAAGCAGGTG ATAGGTGTAG      180
ATTTAGATAG TGAAGGGTA GGCTAAAGTG TTGTAACAAA TGCACCCTCA AGTAGGTAAT      240
GGCTCAAACA CAATAGATGT TCACTTCCCA CATCTCAGAG CAAATTGGGT TCTCCTCATC      300
AGCTAAAGCT TTCCTACATG GGATGATTG GGGAGCAAGA CACTCCATCT ATGGCTCCCT      360
TACCTCCAA GGCCTTCTTA TTGCTTTAT GTAACCAAGT GAAGAGCTCG AG              412

```

(2) INFORMATION FOR SEQ ID NO:235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 574 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:235:

```

GAATTCGCCT TCATGGCCTA GGCTTCTTCG GAGCTGTGTA NTCTTAATTT GCTTTGCTGC      60
TGGCTGGCTG ACAGCTGATG GGGGACTCCT CANGACGGAC TCCCTTCCAG ATGCACCCAT      120
CTCCATCCTT CTCAACTCCC CAACCTTTGT CCTCCCCACT CTTGCTCGC GCGGCGGTCT      180
GAGACCACCA GGACCAAGTT CAGGGGTTTC CTCTCCAGC GAGACTTGGC AGAACAGGCT      240
TTAAAAGCAA AGGAGGCAGC GGAAGACTGT GAATTCCTTT GGACAATTGA TGATATTAT      300
CATGTGCCCC AGTTTCTACA AATAAAAGAT GGGTGGATTA TTTTCTCGAT GGAGGACAAA      360
ACCTTCAACT GTAGAAGTTC TAGAAAGTAT AGATAAGGAA ATTCAAGCAT TGGAGAAGTT      420
TAGGGAAAAA AATCAGAGAT TACAAAATT ATGGGTGGA AGATTAAATC TGTATTCCTC      480
AGTTCTCTAT CTGTTAACAT GCTTAATTGT ATATTGTGG TATCTTCTG ATGAATTTAC      540
AGCAAGACTT GCCATGACAC TCCCACATCT CGAG              574

```

(2) INFORMATION FOR SEQ ID NO:236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:236:

```

GAATTCGGCC TTCATGGCCT AGGCGCGGCC CGGGTTCCCG TTCCTCCGGG AGCCATGCGG      60
TACAACGAGA AGGAGCTGCA GGCTCTGTCC CGGCAGCCGG CCGAGATGGC GGCCGAGCTG      120
GGCATGAGGG GCCCAAGAA GGGCAGCGTG CTGAAGCGGC GGCTGGTGAA GCTGGTGGTG      180
AATTCCTCT TCTACTTTCG GACAGACGAG GCCGAGCCCG TCGGAGCCCT GCTGCTGGAG      240

```

CGCTGCAGAG TCGTCCGGGA AGAGCCCGGC ACCTTCTCCA TCAGCTTCAT TGAGGACCCCT 300
GAGAGGAAGT ATCACTTCGA GTTCAGCTCG AG 332

(2) INFORMATION FOR SEQ ID NO:237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:237:

GAATTCGGCC TTCATGGCCT AATTGCAAGA TCACGGAATC TCCTGAATCA TTAAGAAAAG 60
ATAAAATATC ACAAGCATCT TTAGTGTAT GTGTATTCAG TAATCTTTG GAGTTGTATT 120
TATTAAGCTT ACCAGATTTT AAAGGCATAT AAAATGTGGT AAGATATGAG ACACATACTG 180
AAATATCAGT GCAAAGGGAG AATGGTAGT GAATGGTCAG AAACGAAAAA GCCTCGAG 238

(2) INFORMATION FOR SEQ ID NO:238:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:238:

GAATTCGGCC TTCATGGCCT AGAAGCATTT TTTGTTATTG TGAACATTT TTATACTTTC 60
ATTATAATTT GTTGAGCCTA GAGTTGGGCT ATTTGAATAT TTATTATGAT AATCTTTTGG 120
CTAATGGTAA CAGCATATCT TGTCTAACA AAATTACTGT TAACAGCAAT CGAACTCGAG 180

(2) INFORMATION FOR SEQ ID NO:239:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 578 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:239:

GAATTCGGCC TTCATGGCCT ACTGAGATCC AGACCAGCTC CTCCCAGACC TCTCCAGAAG 60
AAGCCATGGG AACCCCTCGT ATCCAGCATT TGCTGATCCT CCTGGTCCTA GGAGCCTCCC 120
TCCTGACCTC GGGCCTAGAG CTGTTTTGTC AAAAGGGTCT GTCCATGACT GTGGAAGCAG 180
ATCCAGCCAA TATGTTTAAC TGGACCACAG AGGAAGTGA GACTTGTGAC AAAGGGGCAC 240
TTTGCCAGGA AACCATACTA ATAATTAAAG CAGGGACTGA GACAGCCATT TTGGCCACGA 300
AGGGCTGCAT CCCGGAAGGG GAGGAGGCCA TAACAATTGT CCAGCACTCT TCACCTCCCC 360
GCCTGATCGT GACCTCCTAC AGTAACTACT GTGAGGATTC CTTCTGTAAT GACAAAGACA 420
GCCTGTCTCA GTTTTGGGAG TTCAGTGAGA CCACAGCTTC CACTGTGTCA ACAACCTCC 480
ATTGTCCAAC CTGTGTGGCT TTGGGGACCT GTTTCAGTGC TCCTTCTCTT CCCTGTCCCA 540
ATGGTACAAC TCGATGCTAT CAAGGAAAAC CTCTCGAG 578

(2) INFORMATION FOR SEQ ID NO:240:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:240:

```

GAATTCGGCC TTCATGGCCT ACATGAATCC ACTCCTGATC CTTACCTTTG TGGCAGCTGC      60
TCTTGCTGCC CCCTTTGATG ATGATGACAA GATCGTTGGG GGCTACAAC CTGAGGAGAA      120
TTCTGTCCCC TACCAGGTGT CCCTGAATTC TGGCTACCAC TTCTGTGGTG GCTCCCTCAT      180
CAACGAACAG TGGGTGGTAT CAGCAGGCCA CTGCTACAAG TCCCGCATCC AGGTGAGACT      240
GGGAGAGCAC AACATCGAAG TCCTGGAGGG GAATGAGCAG TTCATCAATG CAGCCAAGAT      300
CATCCGCCAC CCCCAATACG ACAGGAGACT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:241:

```

GAATTCGGCC TTCATGGCCT AGGGCACCAC TGAGTTCAGT ACTTCAAAT TGCCGTGCTC      60
TACCTCTCCC CAGTGCACAA AAACACTCTC CACACCAAGC TGCTGCTGCT GGGGGATGGA      120
GGGATGGCGT CAGCGATTCA AGACTGTTTT TCCTACCTGT TCAGCACTTC TTTCAGCGAT      180
ATGAAGTTAA ATCCAGTCTT TCCTGTCTC CAGGCATCAT CGCCATCAAC ATACAGCCAT      240
ACTCCAGGAT TGCCCATCTT CAACATAAAC GGACTCTCCT GGACTCCACT TCCCACATCA      300
GTCACAGCCA CACTTCCTGA GAAAGAAGTC TACTCTTTC ATTCATTTC ATTCACCCAC      360
TGCTCGAG                                     368

```

(2) INFORMATION FOR SEQ ID NO:242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 478 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:242:

```

GAATTCGGCC TTCATGGCCT AGAGAAAATA AAGAGTTATA TCAGAAATTT ACAAACATAA      60
CTTTTAAAT TTAAATTGC AAAATATATA TCATACGAAA ATGAAAATTA TAATTCTTCT      120
TGGATTCTTG GGAGCCACAT TGTCAGCCCC ACTTATCCCA CAGCGTCTCA TGTCTGCCAG      180
CAATAGCAAT GAGTTACTTC TTAATCTTAA TAATGGTCAA CTTTGGCCAC TACAATTCA      240
GGGCCCACTT AATTCATGGA TTCCACCTTT CTCTGGAATT TTACAACAGC AGCAGCAGGC      300
TCAAATTCCA GGACTCTCCC AGTTCTCTTT ATCAGCTCTA GACCAGTTTG CTGGACTGCT      360
CCCAAATCAG ATACCCTTAA CAGGAGAGGC CAGTTTGGCC CAAGGAGCCC AGGCAGGCCA      420
AGTTGATCCC TTACAGCTTC AAACACCGCC TCAGACACAA CCAGGCCAC GTCTCGAG      478

```

(2) INFORMATION FOR SEQ ID NO:243:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 490 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:243:

```
GAATTCGGCC TTCATGGCCT ACTTACAGAA CCTATTCACT GGGAAGGAAG CCCTCATTAT      60
AATGATTTC ATTCTTATGT GTGTTTCAGG ACGACTGGGT TTGGATTAG AAGAGGATTA      120
TTATACACCA CAAAAGGTGG ATGTTCCCAA GGCCTTGATT ATTGTTGCAG TTCAATGTGG      180
CTGTGATGGG ACATTTCGTG TGACCCAGTC AGGCAAAGTG CTGGCCTGTG GACTCAATGA      240
ATTCAATAAG CTGGGTCTGA ATCAGTGCAT GTCGGGAATT ATCAACCATG AAGCATACCA      300
TGAAGTTCC TACACAACGT CCTTTACCTT GGCCAAACAG TTGTCCTTTT ATAAGATCCG      360
TACCATTGCC CCAGGCAAGA CTCACACAGC TGCTATTGAT GAGCGAGGCC GGCTGCTGAC      420
CTTTGGCTGC AACAAAGTGTG GGCAGCTGGG CGTTGGGAAC TACAAGAAGC GTCTGGGAAT      480
CAACCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:244:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 386 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:244:

```
GAATTCGGCC TTCATGGCCT AGAAAAAGA AACTGTCGTG GATACTGTCA GTGTATATAT      60
TTATGTGGTA CCTGAGAGCC ACCCCAAATT AGATTGACTT TAGATCGTTT ATACAAAAAT      120
AGCTTGAAGA ACTGTTTTTT CCATGGTAAA TGCTTTGAA TATTAACCTA GTTATGTTAG      180
ATTCTTACCT CAGTGGTACT GTCACAGCCA TTGGTTACAT TTCTGAAACC CTTGAGAGTA      240
AGAGTTTGG TTTTTGTTT TGTTTTGTG TGTTTTGTG GATGGAGTCT TGCTCTGTG      300
CCCAGGCTGG AGTGAGTGC AGCAACCCAG GTGGAGTGCA GTGCAACCTC CACCTCCAG      360
GTTTAAGCGA TCCTCCTAAC CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:245:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 396 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:245:

```
GAATTCGGCC TTCATGGCCT AGCTTCAGTA GCAAATAAGG ACATCATCTG CTATAACCTA      60
CAAGCAGTTG GACAGATATT CTACATTTC TCATTTCTCT ACACCGTCAA TTACATCTGG      120
TATTTGTACA CAGAGCTGAG GATGAAACAC ACCCAGAGTG GACAGAGCAC ATCTCCACTG      180
GTGATAGATT ATAATTGTCT AGTTGGTCAA ATGGCCTTTG TTTTCTCAAG CCTGATACCT      240
CTGCTATTGA TGACACCTGT ATTCTGTCTG GAAATACTA GTGAATGTTT CCAAACCTTC      300
```


AGTCAGAGCC ACAAGTGTAT CTTGATGCAC TCACCACCAT CAGCCATGGC TGAACCTCCA 360
CCTTCTGCCA ACACATCTGT CTGTAGCACA CTCGAG 396

(2) INFORMATION FOR SEQ ID NO:246:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 514 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:246:

GAATTCGGCC TTCATGGCCT ACACCTTTCA CTTATCTTAT AGTCACTTAA TTCCTCTACT 60
CTTATCATTT GATATTTTCA TTTTATTGTG TATCTCTGTN NGGCCAAATC AATAGATTTT 120
GAACAATCTC ACACTTAACC TTTTAAAAAA ATCTAATAGG CCCAGTTTCC TCTCAACAAT 180
CTTTGAAGAA CCTTCGAGAA AGGAGAAACA CAGACCTCCC GCTTCTAGAC ATGCACACTG 240
TAACCCGGGA AGAGGGAGAA GGCATGGAGA CAACTGATAC GGAGTCTGTG TCTTCCGCCA 300
GCACATACAC ACAGTCTTTA GAGCAGCTGC TTAACCTCTC CGAAACTAAA CTGGGTATGT 360
TACTCTGTCT AAATATGTTT TTCTTATTTA ATTTCACTGT CTTATTTAAT TACTANTACT 420
CTAAGTTACA TATGCTTTT NGGGCTGCTC CAATAAAATT TCTTCAATA TTCCACTACC 480
TGTTTGATT AGGTTCTCTA GAGGGACACT CGAG 514

(2) INFORMATION FOR SEQ ID NO:247:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:247:

GAATTCGGCT TCATGGCCTA GGTCTTCTGT ACATGGAGAT TAACTGTCT TCCAAAGTGA 60
AGAGTTTATT GTTCTAGATC TTGAGCACAA AGGTTGGTAT ACGTTAATAA AAAAAATAGC 120
AAGGGAAGAA AATCATTTCC TTCATACCAA GTAAGAGAGC ACTTATCATG GTAGGCACTG 180
GCTTTGCAAT TATGAGACCA GTAGTAGAAA TAGCTTTAGT TTCCTCAATT TTCCTGGAGT 240
ATTCTTCAGA CTTTCTTTAC ACTGCTCAAG GTGGGGCGAG TGGCAGGGCG GACCCTGGCG 300
ACCTGACGCT GCGGAGGCTC GAG 323

(2) INFORMATION FOR SEQ ID NO:248:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 423 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:248:

GAATTCGGCC TTCATGGCCT AGGAACAGTG TGTGTTTTTG TGTGTGGCTT GCATTCTCTC 60
CTCCGTTTTT GGAGCAGCGT GAGATTATTG CAATGCTACA TTTCCTCCCT CTGCGCCCTC 120
CTACCCCATC AATGTCTCAT GGGTGGTGTG ATAGAGGCTA TGGGAGTGAA GACCACTGGT 180

GTTAGTCTGT GTATAGTTC TGGGGTGTGG CGAGTACCAG CTCTGACAGC GGAAGAGAAC	240
TATACTGTTG ATTCCCATTA TTCTCAGTAG GTGTGTTCTA TAAAATTGCT GCGAACACCA	300
AATTAGCGAA TCCTGAACCA TCGTTCCCAG AGGAATAGGG GGTAGGGTC CTGTGATCCT	360
CAAGTTGCAA CATGTCTTC GACTGATTAA TATGTAACT TGTATTATAT GTGCAATCTC	420
GAG	423

(2) INFORMATION FOR SEQ ID NO:249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:249:

GAATTCGGCC TTCATGGCCT ACCGAAACCA AATAATTCAA GCACTGCTTA TTACAATTTT	60
ACTGGGTCTC TATTTTACCC TCCTACAAGC CTCAGAGTAC TTCGAGTCTC CCTCACCCCT	120
CGAG	124

(2) INFORMATION FOR SEQ ID NO:250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:250:

GAATTCGGCC TTCATGGCCT ACATCTATGA CTTTTTAAAC ATGCGGCGTT TTGTGAATAT	60
CATGATAATA ACAAGAGTCA ACAGGCTAAG TGAGAGGAGA GGGATGCTAC GCCTACGCTG	120
CCCCACCAC GGCCAGCCGG CTTCTGCGCC TTGGTGTTG GATTTCTTT GTGATTTTAC	180
GGGGTTTTGT GTTTTTTTT TCTTGTTTT TGTGTTGTTA TTTTCTTG TCCACTTGAT	240
TTGCATGCAA CACCACAAA AAGGAAACAC AAAACCCCGT CTGCTCGAG	289

(2) INFORMATION FOR SEQ ID NO:251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:251:

GAATTCGGCC TTCATGGCCT ACACTATGAG AGGACCGATT GTATTGCACA TTTGTCTGGC	60
TTTCTGTAGC CTTCTGCTTT TTCAGCGTTG CCACACAATG TCTGGCCTTC CCCAAAATAG	120
AAAGGAGGAG GGAGATAGCA CATGTTCTATG CGGAAAAAGG GCAGTCCGAT AAGATGAACA	180
CCGATGACCT AGAAAAATAGC TCTGTTACCT CAAAGCAGAC TCCCCAATG GTGGTCTCTG	240
AAGATCCAAT GATGATGTCA GCAGTACCAT CGGCAACATC ATTAATAAAA GCAAAACTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:252:

```

GAATTCGGCC AAAGAGGCCT ATTTTCTTTT CTGCAAACAC TGTGTATAGT GAGACTTGTT      60
CTACTTTGGA GAACAGGTGA CCTTTTGAAA ATGAGGTTGA GTTCTTCCT TTCTGATGCA      120
TTGATTTTGG AAGATTTTCT TTTCCCTCTT CCCCTCTCCC TCGAG                      165

```

(2) INFORMATION FOR SEQ ID NO:253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:253:

```

GAATTCGGCC AAAGAGGCCT AGCTTCTTTG TATAATTAAA TCTGAGTTTT GTTTGAGCAT      60
CTTTCAACAT GTACCATATT TATGACAATT CTCCTCCATA GGATCTATCT GTTCTGCAAC      120
AAGTATTGAT CTTACAGTAA AATTTTTCAC AAATTCATTA GATTCTATGT CTCTTTTCT      180
GGTAGGAATT TTTGTGCAGG TAGCTATCTC TTGCCCTAGA TTATTCTCCT TGTTTAGCTG      240
CTGATTCTTA AACTGGCCTC TAGATTTCCT GATTCTTCTC GGTACAGACT TTCTCTTTGC      300
AAGTTCTTCC ATCTCTAATC TTTGAGATTA ATCTTCTTTT GAAATGTCCT GCTGCTCTAC      360
TCTTGATGTT CTCGAG                      376

```

(2) INFORMATION FOR SEQ ID NO:254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:254:

```

TCTCCAAGGG AAAATAAATG CTTTACTAT CTAGTTTGTG TCTTTGAGAA TTAAGACTCT      60
TTTTTTTTTT TTTTATTCCA GTAGCTTTTG GGGTAGAGTT TGGCTCTTTG AGAATTGCAT      120
ACTAATTAAT TTTAGGGGTG ATTTGTACAT CATCTCTATA TTCCTGAAAC ACAGTAGAAA      180
CAGCCAGCAG TCAGGCAACC ATCTACCATG ACCATTAAAA CATCCCCAAA GTGAAACACC      240
AGATGTGATC TGCTAGATTT AGTGGAGGCG GCTGGCTCGA G                      281

```

(2) INFORMATION FOR SEQ ID NO:255:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 571 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:255:

```
GAATTCGGCC AAAGAGGCCT AGCTAGNCTT GCTCAGCTTT GTGGATACGC GGACTTTGTT      60
GCTGCTTGCA GTAACCTTAT GCCTAGCAAC ATGCCAATCT TTACAAGAGG AAACGTGTAAG      120
AAAGGGCCCA NCCGAGATA GAGGACCACG TGGAGAAAGG GGTCCACCAG GCCCCCCAGG      180
CAGAGATGGT GAAGATGGTC CCACAGGCCN TCCTGGTCCA NNTGGTCNTC NTGGCCCCCN      240
TGGTCTCGGT GGGAACTTTG CTGCTCAGTA TGACGGAAAA GGAGTTGGAC TTGGCCCTGG      300
ACCAATGGGC TTAATGGGAC CTAGAGGCCC ACCTGGTGCA GCTGGAGCCC CAGGCCCTCA      360
AGGTTTCCAA GGACCTGCTG GTGAGCCTGG TGAACCTGGT CAAACTGGTC CTGCAGGTGC      420
TCGTGGTCCA GCTGGCCCTC CTGGCAAGGC TGGTGAAGAT GGTCAACCCTG GAAAACCCGG      480
ACGACCTGGT GAGAGAGGAG TTGTTGGACC ACAGGGTGTCT CGTGGTTTCC CTGGAACCTC      540
TGGACTTCCT GGCTTCAAAG GCAACCTCGA G                                     571
```

(2) INFORMATION FOR SEQ ID NO:256:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 453 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:256:

```
GAATTCGGCC AAAGAGGCCT ATGCGCAAGG ATCAAGCCGA CTACCTGTGC TGTCTACTGG      60
GACAGCAGTC TCCGAGCTAC TCCGTACCTC CCTCTGCCAG GTCGTGGAGT TAGGCCCCAG      120
TCCCTACTTG TCACTGGTTC CCACTGTGCT CCTAACTGTG CAGCACCTGG GAGCTCTGGC      180
CTGGGGCTGG AGGCCCTGGT AGGAGCTGCA GTTGGAGGCC GTTCTGTGCC CAGCAGCGGT      240
GAGCGGCTCC CATGGGCCCT GTGTCTGCAG GGAGCCAGGG CTGCGGCACA TGTGCTGTGA      300
AACTGGCACC CACCTGGCGT GCTGCTGCCG CCACTTGCTT CCTGCAGCAC CTCTACCTC      360
GCTCCGTGTC CTCCCTCTCC CCGCGCCTGG CTCAGGAGTG CTGGAAGAGC TCACGCCTCG      420
GCCTGGGAGC CTGGCCTCTT GATATACCTC GAG                                     453
```

(2) INFORMATION FOR SEQ ID NO:257:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 307 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:257:

```
GAATTCGGCC AAAGAGGCCT ATGTCATGAG TGAACCTGGC AATTGCCTTG TTAAGACAG      60
TTGGACATTA TCTTCCACAT TGCGAAGCTA TACATGTCTG ATATGTTCTG AAAGAATAGA      120
ATTTATAGTT AGATATACTA TTTTGTGATTA TTTACTCAGA AGGAGACATG TAATTATTCT      180
TATGTTGTCA TGAAATCTA TTAATGCAT TTATATTCA CATCAATGTT ACGAAGTTCC      240
ATTATTATTA TTTTACAGAG GGGAGGCCAA GATACAGGAG TGGAAATTAC TTGCCTATC      300
GCTCGAG                                     307
```

(2) INFORMATION FOR SEQ ID NO:258:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 360 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:258:

```
GAATTCGGCC AAAGAGGCCT AAGAAGATGA ACAAGCGCCA GCTCTATTAC CAGGTTTAA 60
ACTTTCGCCA TGATCGTGTG TTCTGCACTC ATGATATGGA AAGGCTTGAT CGTGCTCACA 120
GGCAGTGAGA GCGCCATCGT GGTGGTGTG AGTGGCAGTA TGGAGCCGGC CTTTCACAGA 180
GGAGACCTCC GTTTCCTCAC AAATTTCGGG GAAGACCCAA TCAGAGCTGG TGAAATAGTT 240
GTTTTTAAAG TTGAAGGACG AGACATTCCA ATAGTTCACA GAGTAATCAA AGTTCATGAA 300
AAAGATAATG GAGACATCAA ATTTCTGACT AAAGGAGATA ATAATGAAGT TGCTCTCGAG 360
```

(2) INFORMATION FOR SEQ ID NO:259:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 411 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:259:

```
GAATTCGGCC AAAGGGGCCT ACCTGAAACG GCAGTCCGGT CCCTCCGACA TTGTCCAGCG 60
GAAGGCCTGG GCTTCACACT CTGTGCCTCC CGGCGCTACC TGGCAGCATG CCGAGCACAC 120
AGCAGATGCT CAATGAATGC CCAACCAACC CTATACCTGG CTTGGATCTC AAGCTCCCTG 180
GCCGGGGCCT GATGGAAGGC TTTGGGGGCA CAGGAGGCTG CCCCTTGGG CGCCCCCGGC 240
CACCTCTTCG CCCTCGAATC TCAGGCAGCT TGGTCAGGAA CTTCTTCTCC ACGTATTAG 300
CGTGAATCCA GGCTCCTTC TCCTGCCTGT GGGAGGGGAG AAGCAGCAG TCTTCCCTCT 360
TCTGCTCCAG GGTCCCCCA TTCCCTGGG AGGCTAAACC CATAGCTCGA G 411
```

(2) INFORMATION FOR SEQ ID NO:260:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 324 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:260:

```
GAATTCGGCC AAAGAGGCCT AGGGAGTGTT TGCCTTTCTT CTCGTTTGG CAGTGAAACA 60
CATCTCAGAA AGGTGGAGCT GATCAGAATA ATGTTTCAGCA TCAACCCCTT GGAGAACCTG 120
AAGGTGTACA TCAGCAGTCG GCCTCCCTG GTGGTCTTCA TGATCAGCGT AAGCGCCATG 180
GCCATAGCTT TCCTGACCCT GGGCTACTTC TTCAAATCA AGGAGATTAA ATCCCCAGAA 240
ATGGCAGAGG ATTGGAATAC TTTTCTGCTA CGGTTCAATG ATTTGGACTT GTGTGTATCA 300
GAGAATGAAA CCCTCAAGCT CGAG 324
```

(2) INFORMATION FOR SEQ ID NO:261:

- (i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:261:

```
GAATTCGGCC AAAGAGGCCT AGTGGGGCTG TATTTTAATA CAAGAAAGAC ATTGCTCTAG    60
AACATGGCTC GCCTTTGCTT CAGGGCCTAG CAGTTTATTT TAGCCATAAG GGTAAAGGGAG    120
CAGGTCAGAA ATGACTTTTA GTGTAATCCT ATCTGTAATT AAAAATACAA ATGCTGTCAT    180
AAGATCAAAT GTTATCAAAA ATCAGTATTT AAAATTAAAT TTACCCCCAA ATTTCTTTCA    240
AAAAAGTTGT AATGTTCTTT TTCAGTGAAG CCTTGCACT GCTAGAGCTG AAGAATGTGA    300
TCAATCGGCT TGTTGAATAA TCCCGCACAG TAGGTATTCC GCTGAAGCCA ACTCTAGCTG    360
GGGGCTCGAG                                     370
```

(2) INFORMATION FOR SEQ ID NO:262:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 286 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:262:

```
GAATTCGGCC AAAGAGGCCT AAGAAATAGG ACTATACAAA TTTCAACTT CTTTGATAT    60
CAGTTTGGT AAGATGCATT TTTCTTCTGA GAATTGTTT CATTGTAATT TCCAATTTA    120
TTAGCATGAA GTTGTTAATA AAAATCTTAT ATTTTACTC AAATTTTGAG ATAGTTGTAG    180
ATTTACATGA AGTTGTAAG AATAATAGAA AGATCCTGTG TACCTTTTCC CAGTTTCC    240
CAAAAGTAAC ATTTGCATA ACTCTAGTAC AGTAGCACAA CTCGAG                                     286
```

(2) INFORMATION FOR SEQ ID NO:263:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 310 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:263:

```
GAATTCGGCC AAAGAGGCCT AGGCAAACCG TGTACTAAGC ATCAGTGCAG AGATAGTGAA    60
TGAGACACAG TATTTCCACC TTTGAGCAGT GCCAGTCTAG TATTAGAATA TTTTGGCTA    120
AAAAATTATT TTGAAGCATA AAGAAGCTTT TGTTGCTCT GGTGATTTTC ATAACATATT    180
CACATTCTTA ATGTATTTT GGTTTTTCAG AAAGTTACTT CTGGCCTGTG TTCTTTCAGA    240
ATATAGGTTG CAGCTTGTGT TAAGTGCAGG AACTATTGAT AGACTGAGTT TAGAAGAAGG    300
GAAACTCGAG                                     310
```

(2) INFORMATION FOR SEQ ID NO:264:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 321 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:264:

```
GAATTCGGCC AAAGAGGCCT AGGACTTTGG GGCAGGTGAT TAAATTTATA TAGGTACCTC      60
AAGAAAAAGA ACCTGAATAT GCTGCATTTT CTTTCTTTAG CTTTACATG TAGCATTTTG      120
TTTGCTTTT GTTATTTTGG TTTTGATATA TGCTTTTGG ACCCCAATAG ACTGTTGAAA      180
GAAATTTAAA AATTACTCTT GTAGGGATAT AGTATCCTTA AAAAAATAAA ATTAAAAAAA      240
ATTTAAAAAA ATTGCTGCAA TATCTGGCTC GAAGGTTGCC CTATATTAGA ATAATACTTT      300
AGCCAAACAC ATCAGCTCGA G                                     321
```

(2) INFORMATION FOR SEQ ID NO:265:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 550 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:265:

```
GAATTCGGCC TTCATGGCCT TGTGATTCTG CAAAGGAGGA ACAATAATTC ACTGTTTCCC      60
AAACTTATCT GACCATAGAA CATATNTCTC AGAGTATTTT TCAAGAGTAG TATTTTCTGT      120
AATATATGAT GAAAAATAAT CGTATCGGCC ATCTTTGTAC ATAAGGTCAA AATGTCAGCC      180
AGCCCTGAAA TAAATGCAAG CCAAAAGGTA GAGAGATAAG TGAATAAAGC TGGCACACTG      240
TCAGTCCGGA GTACCATGCT GCATTCTGAG TCAAGCTCCA GGAAACTGAG CTAGGGTTTG      300
TCTCTAAGAA GAAAAACTGG AGCGTCCAAA GCTTCTGGAT TCCATTTAAT TAAACCCCTT      360
TTAAATTAAT TCCTTGTAAC TGAAGAGTAT CGGTGGATGA AGAAAAATA GTCTCACATG      420
TCTTCATTTC CATCCTTGGC TCAGTACAGC TCCAGTTCCA TTATTCTTAA ACATCTATTA      480
ACATGATTGC TAAATAATTA CACAGGCTAA CTGCCAAGCA TTTTTCACAG GAAGCAAGGC      540
ACTGCTCGAG                                     550
```

(2) INFORMATION FOR SEQ ID NO:266:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 301 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:266:

```
GAATTCGGCC TTCATGGCCT AGTTAAGTGG GAAGTTAAAT GGCAAGTACT AGAATGCCAC      60
CTATGGCAAG CACTAGAAATG GTCTAGGTGT GAAATGAGGG AGTAATGTCA GGGAGTCAAG      120
GTGGCCATCC ATAGCAGTGA TTCTTATCTG GGGTAGGGGG TGAATTTTCA GTGGAGGGAG      180
GTCTCTGGAC ATGGACCCCC AGGCAGGGCT ATCCAATCAT CTGAGGGGTG AGCAGTGTTC      240
AGCTCAGTAA AAGTAAGGGA AAAAAATAG CAGTCTCTAA AAGGAACATA GAGCGCTCGA      300
G                                     301
```

(2) INFORMATION FOR SEQ ID NO:267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:267:

```

GGGGAGAGCA TCAGGAAGAA CAGCTAATGG ATGCTGGGCT TAATACCTAG GTGATGGGAT      60
GGTCTGTGCG GCAAACACCA TGGCACAAGT TTACCTATGT AACCTGCACA TCCTGACATG      120
TACCCCTGAA CTAAAAATGA AAGTTGGAGA CCAAAAAACA AACACCATA AACTACAAA      180
ACTTCTTAAA CAATAAACTA GTAGAAAATT TCTAAAATAT ATAATTCAAG AATTATATAA      240
GAGCTCTTTT TATATGTAAA TATAAATTTA AATACAAGAG AACATCTAA AACAGTTTGC      300
TTCTGAGAAA CGTGACTGGT TATTAAGAAG AGGTATATAG GGGCTCACTC GAG      353

```

(2) INFORMATION FOR SEQ ID NO:268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:268:

```

CATTATTTAA CCTTTTAAAC AATCAAGAGA TTGCTTTTAA AATTGCTCT AAAAAGGTTT      60
GATTTTATAC GAAAGAGAGA GCACTTGAAT ATATCTTTAT GTACCACCGT GTCTCTTTT      120
GTTAGATTTT TCATCTGTGG GTATAATATA AAATATTCTT AAAATGAAAG CTTTACGCTT      180
GTGTTTGAGA CTAAGCAACT TGCATTGTGT CATGACCCCT CTAATACCAC AAACCTCGA      240
G                                     241

```

(2) INFORMATION FOR SEQ ID NO:269:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:269:

```

GAATTCGGCT TCATGGCCTA CACTCAACCA CTGAAAAAGC TGAAATCAA TGTTTTAAAG      60
GTTCAACAAGT GTGCCGTGTG TGGCTTCACC ACCGAAAACC TGCTGCAATT CCACGAACAC      120
ATCCCTCAGC ACAAATCGGA TGGTCTTCC TACCAGTGCC GGGAGTGTGG CCTCTGCTAC      180
ACGCTCAGC TCTCTCTGTC CAGGCACCTC TTCATCGTAC ACAAGTTAAA GGAACCTCAG      240
CCAGTGCCA AGCAAAATGG GGCTGGGGAA GATAACCAAC AGGAGAACAA ACCCAGCCAC      300
GAGGATGAAT CCCCTGATGG CCCCTCGAG                                     330

```

(2) INFORMATION FOR SEQ ID NO:270:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:270:

GCGGGCACCA	TTTCCAGTAT	GTACCAAACC	AAAGCCGTCA	TCATTGCAAT	GATCATCACT	60
GCGGTGGTAT	CCATTTCAGT	CACCATCTTC	TGCTTTCAGA	CCAAGGTGGA	CTTCACCTCG	120
TGCACAGGCC	TCTTCTGTGT	CCTGGGAATT	GTGCTCCTGG	TGACTGGGAT	TGTCAC TAGC	180
ATTGTGCTCT	ACTTCCAATA	CGTTTACTGG	CTCCACATGC	TCTATGCTGC	TCTGGGGGCC	240
ATTGTTTCA	CCCTGTTCCT	GGCTTACGAC	ACACAGCTGG	TCCCAGGGAA	CCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:271:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 407 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:271:

GCCAGACTAC	CACAAGCCCC	ACCCACACTA	TGCCAAGCCC	TACCCATACC	ACAGCAAGCC	60
CCACTCATAC	TTCCACAAGC	CCCCACCATA	CCCCCACAAG	TCCCACCCAC	AAAACCAGTA	120
TGTCACCTCC	CACCACTACA	AGTCCTACCC	CCAGTGGTAT	GGGCCTAGTC	CAGACTGCCA	180
CAAGTCCAC	CCATCCTACC	ACAAGCCCCA	CCCATCCAC	CACAAGCCCC	ATCGTTATAA	240
ATGTAAGCCC	TTCCACTTCT	CTAGAACTTG	CTACCCCTCTC	CAGCCCCCTCC	AAACACTCAG	300
ACCCCAACCCT	CCCAGGCAAT	GACTCCCTTC	CCTGTAGTCC	CCCAGTCTCC	GATTCTACA	360
CTCAGGCAGA	CCCTATGGCC	CCCAGAACTC	CCCACCCAAG	TCTCGAG		407

(2) INFORMATION FOR SEQ ID NO:272:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 288 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:272:

ACTGAGCTCA	AGGACCCCTC	CAAGAAGAAG	ATGCAGCACA	TCTCCAACCT	GTCCATCGCT	60
GTCATGTACA	TCATGTACTT	CCTGGCTGCC	CTCTCGGCT	ACCTCACCTT	CTACAACGGG	120
GTGGAGTCGG	AGCTGCTGCA	CACCTACAGC	AAGGTGGACC	CGTTTGACGT	CCTGATCTCG	180
TGTGTGCGCG	TGGCCGTGCT	GACAGCAGTC	ACGCTCACAG	TGCCCATCGT	TCTGTTCCCG	240
GTGCGCCGCG	CCATCCAGCA	GATGCTGTTT	CCAAACCAGG	AGCTCGAG		288

(2) INFORMATION FOR SEQ ID NO:273:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 537 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:273:

GAATTCGGCC	TTCATGGCCT	AGTCAAGCTA	GGTAAGCTAA	AAAGAAGAAA	ACCTGGTTAC	60
AGCCCCGGTGA	ATTGATTTT	TTCCAGCCGA	GAAATAGATA	TTTCTCTCAC	ATATATTTGG	120
AAAACTTTAG	TCATCTTCAT	AAAACTTAAA	AAGTTACCTA	AGCACACACA	GCAAGTTTCT	180
CCTTTCTTCC	TTTTCCACAC	CCTTACCAGT	TCACTATGTT	TCTACCAATC	CAGTGCCCGAG	240
TTGCCAATGA	TGTTGCTCTC	ACATGAATTT	ACTGCATTCC	CTTCTGGTTC	CCCAGAAGGT	300
CTTGAAGAAA	GAGGTTTCTA	CTAGTGGACC	CAAACAGAAT	TTCTTGGCTG	GTGATACTCA	360
GATTGTGTTT	AGAGCCTGGT	ATGAAGAAGG	GGCCAGGTGT	AAGAAGTAGT	TAATCAACTG	420
CACGTTGATT	TCAGGCTGAA	TATTCAACCA	TCTGCAGCCA	CCCGTCTCTA	AAAGTCTAGC	480
TGAAGCACAA	TTGATTGTGC	CATAGAATGA	GCAAACGCTT	GAAAACACAA	GCTCGAG	537

(2) INFORMATION FOR SEQ ID NO:274:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:274:

GCGAGCTCGT	GTTTTAAAGG	ACCAAATAGA	AGTTTACCAG	GAGAGAAGTG	ACAGAAGTGC	60
TGCTTAGATA	GAGGAAGGGC	ACACACAGAT	GCAAGCATGT	GCAGAAATGA	GCAAACCACT	120
GAGACGCTGC	CTTGAGCTCT	GTGTCACACT	GCTATGTTGC	AGCCTGGGAG	GCTGTTCCCA	180
GTTGAGCCCT	TCGGAACCAG	CCATGAGATG	GCACGGGTAC	GCGGAAGGGA	GCAGTCTCCA	240
TGGCTGGGTG	GTGATGGGGG	CTTCTCGAG				269

(2) INFORMATION FOR SEQ ID NO:275:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:275:

GATGGCTCCC	CAGAGCCTGC	CTTCATCTAG	GATGGCTCCT	CTGGGCATGC	TGCTTGGGCT	60
GCTGATGGCC	GCCTGCTTCA	CCTTCTGCCT	CAGTCATCAG	AACCTGAAGG	AGTTTGGCCCT	120
GACCAACCCA	GAGAAGAGCA	GCACCAAAGA	AACGGAGAGA	AAAGAAACCA	AAGCCGAGGA	180
GGAGCTGGAT	GCCGAAGTCC	TGGAGGTGTT	CCACCCGACG	CATGAGTGGC	AGGCCCTTCA	240
GCCAGGGCAG	GCTGTCCCTG	CAGGATCCCA	CGTACGGCTG	AATCTTCAGA	CTGGGGAAAG	300
AGAGGCAAAA	CTCCAATATG	AGGACAAGTT	CCGAAATAAT	TTGAAAGGCA	AAAAGCTCGA	360
G						361

(2) INFORMATION FOR SEQ ID NO:276:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:276:

GCCACAATAG CGGGATTGAT CTCCTTAGGA CCTATCTTTG GCGTTGCCAG TTCCTTTTAC	60
CTTTTGTGAG TTTAGGTTTG ATGTGCTTTG GGGCTTTGAT CGGACTTTGT GCTTGCATTT	120
GCCGAAGCTT ATATCCACC ATTGCCACGG GCATTCTCCA TCTCCTTGCA GGTCTGTGTA	180
CACTGGGCTC AGTAAGTTGT TATGTTGCTG GAATTGAACT ACTCCACCAG AAAC TAGAGC	240
TCCCTGACAA TGTATCCGGT GAATTTGGAT GGTCTTCTG CCTGGCAGAA CTCGAG	296

(2) INFORMATION FOR SEQ ID NO:277:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:277:

GAATTCGGCC TTCATGGCCT AGGATGTAGA ATCCTGCTTA TCTGTGAAAT GCAGTTGACA	60
CATCAGCTGG ACCTATTTC CGAATGCAGG GTAACCCTTC TGTATTAA AGATGTAAAA	120
AATGCGGGAG ACTTGAGAAG AAAGGCCATG GAAGGCACCA TCGATGGATC ACTGATAAAT	180
CCTACAGTGA TTGTTGATCC ATTCAGATA CTTGTGGCAG CAAACAAAGC AGTTCACCTC	240
TACAAACTGG GAACAATGAA GACAATGAAC TCGAG	275

(2) INFORMATION FOR SEQ ID NO:278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:278:

TCGTTCCCTT CATCTCTCC CTGCCAGAG CAGGGACTCT CTCCATATA ACAAAGGAA	60
AACCACTGGC CAGGGTATGG TCAATACCTC AACATATCCA GACATCACAG CACCAGAACA	120
CCAGTATGTA TATCCACAA GTACTCGAG	149

(2) INFORMATION FOR SEQ ID NO:279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:279:

GCAATCAGAT AAAGAAAGAC CTGGCTGACA AGGAGACACT GGAGAACATG ATGCAGAGAC	60
ACGAGGAGGA GGCCCATGAG AAGGGCAAAA TTCTCAGCGA ACAGAAGGCG ATGATCAATG	120
CTATGGATTG CAAGATCAGA TCCCTGGAAC AGAGGATTGT GGAAGTCTCT GAAGCCAATA	180
AACTTGCAGC AAATAGCAGT CTTTTTACCC AAAGGAACAT GAAGGCCCAA GAAGAGATGA	240

TTTCTGAACT CGAG

254

(2) INFORMATION FOR SEQ ID NO:280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:280:

GACAGCCTGG AAGTTTGAG ACCCTGACAC ACCCACCTTC TCACCTGGGC TCTGCGTATC	60
CCCCAGCCTT GAGGGAAGAT GAAGCCTAAA CTGATGTACC AGGAGCTGAA GGTGCCTGCA	120
GAGGAGCCCG CCAATGAGCT GCCCATGAAT GAGATTGAGG CGTGGAAAGC TGCAGAAAAG	180
AAAGCCCGCT GGGTCCTGCT GGTCTCTATT CTGGCGGTTG TGGGCTTCGG AGCCCTGATG	240
ACTCAGCTGT TTCTATGGGA ATACGGCGAC TTGCATCTCT TTGGGCCCAA CCAGCGCCCA	300
GCCCCCTGCT ATGACCCCTG CCTCGAG	327

(2) INFORMATION FOR SEQ ID NO:281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:281:

GCCTGGAACC TGATTCTCT GACCGTCTTT ACCCTGTCCA TGGCCTACCT CACTGGGATG	60
CTGTCCAGCT ACTACAACAC CACCTCCGTG CTGCTGTGCC TGGGCATCAC GGCCCTTGTC	120
TGCCTCTCAG TCACCGTCTT CAGCTTCCAG ACCAAGTTCG ACTTCACCTC CTGCCAGGGC	180
GTGCTCTTCG TGCTTCTCAT GACTCTTTTC TTCAGCGGAC TCATCCTGGC CATCCTCCTA	240
CCCTTCCAAT ATGTGCCCTG GCTCCATGCA GTTATGCAG CACTGGGAGC GGGTGTATTT	300
ACATTGTTC TGGCACTGA CACCCAGTTG CTGATGGGTA ACCGACGCCC GCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:282:

GCGGGCTGCA GAATGATAGA CGAGCTCAAC AAAACGCTGG CCATGACCAT GCAGAGGCTG	60
GAAAGCTCTG AGCAGCGGGT CCCCTGTTCC ACTTCTTACC ACAGCTCTGG GTTGCACTCG	120
GGTGATGGGG TCACCAAAGC AGGACCTATG GGCCTTCCAG AAATAAGACA AGTGCCAACT	180
GTGTGATTG AATGTGATGA CAATAAAGAA AATGTGCCTC ATGAGTCAGA CTACGAAGAC	240
TCTTCTTGCC TGTATACAAG AGAAGAGGAG GAAGAGGAGG AGGACGAAGA CGACGACGAA	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:283:

```

AATCAATCAA CTAGGCATAT GACACAGTAG TCCATTATAA AAGAAGACAT ACATCCAGCA      60
CCATCAACTA ATTCTTAAGA TAAGTTATCT GGGAAAATTG AAGAACAAAT AAATTCAACG      120
AAATACTGTA AAGTGAACGA AGACATAAAA CCAAAGAAAA CTGAGGCCAT TTCTGCCAAG      180
AAAGGAACAG CAAAGAGTAA AGATGAAAAA TATTCTAAGA TAATACCAGA AAAAGATAAT      240
TCCTACATGG ACAAAGATGA GCATGGTTCA TCCTCTGAAA GTGAAGATGA AGCGCTGGGT      300
AAATATCATG AGGCCTTATC CAGAACACAC AATTCCGGAC TACCACTCGA G              351

```

(2) INFORMATION FOR SEQ ID NO:284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:284:

```

AAGTTAAAGG TATTAAATAA ATGAGTTTCT CCTTAATTTT GTTAATGCTC TTTTAGCTAA      60
TAAGACTTTT TCTAGAGTTA CATATTTTAA TCTGTTTCAT TTTTATTTT TCCTTTGGTT      120
TTATATTTT AAAAGCCATT ATATCCCTCC CACTGGTAAC ATACACATAC ACAGACACAC      180
ATCTATTTCA AATGAATACT TACTACTTTA TCATTTTCAG TCTTAATTGT ACT              233

```

(2) INFORMATION FOR SEQ ID NO:285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:285:

```

GCGGCGCCGC AGCAGTTCCA GGAAGGATGT TACCTTTGAC GATGACAGTG TTAATCCTGC      60
TGCTGCTCCC CACGGGTCCAG GCTGCCCCAA AGGATGGAGT CACAAGGCCA GAATCTGAAG      120
TGCAGCATCA GCTCCTGCCC AACCCCTTCC AGCCAGGCCA GGAGCAGCTC GGACTTCTGC      180
AGAGCTACCT AAAGGGACTA GGAAGGACAG AAGTGCAACT GGAGCATCTG AGCCGGGAGC      240
AGGTTCCTCT CTACCTCTTT GCCCTCCATG ACTATGACCA GAGTGGACAG CTGGATGGCC      300
TGGAGCTGCT GTCCATGTTG ACAGCTGCTC TGGCCCCTGG AGCTGCCAAC TCTCCTACCA      360
CCAACCCGGT GATCTTGATA GTGGACAAAG TGCTCGAG              398

```

(2) INFORMATION FOR SEQ ID NO:286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:286:

```
GAATTCGGCC TTCATGGCCT ACACCCAGCC AATTTTTTTG TATTTTGTAGT AGAGACGGGG      60
TTTCACCATG TTAGCCAGGA TGGTCTCTAT CTCCTGACCT CATGATTTCG CCGCCTCGGC      120
CTCCAAAAAA AGAACATTTT ATATTTGAGT GCTATTTCCT TTGCGGCACC AAAAC'TTAT      180
AACACACTGC CTTCTGAATT TTTTTTTTGG GTTCTGCTC AGCTCATTGT TAATCATATT      240
GTTCCCATGT ATGTCATGAG TTATTTTCTT CCTAGTCTTT TCAAAATTTT CTGTCTTTG      300
ACTTTTAACA GTTTAATTGT AACAGTGTAT ATCTTTAAAG TTAAATTCAT GCTGTGGAAT      360
TTTTATAAGA GCCACAAAGG CCTTCCTCTG TGTTTGTGTT TTGTTTTTGT TTTGTGTTTC      420
ATTTTGTAGA CAGGCTCTCA CTGTCCCTCA GTGGCTCTCG AG                        462
```

(2) INFORMATION FOR SEQ ID NO:287:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 281 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:287:

```
TGGACAGTCT AGAAGATGCT GTGGTGCCCC GGGCTCTGTA TGAGGAGCTG CTGCGCAACT      60
ACCAGCAGCA ACAGGAAGAG ATGCGCCACC TCCAGCAGGA GCTGGAGCGG ACTCGGAGGC      120
AGCTGGTACA ACAGGCCAAG AAGCTCAAGG AGTACGGGGC ACTTGTGTCT GAAATGAAGG      180
AGCTCCGTGA CCTTAACCGG AGGCTCCAGG ACGTGCTGCT CCTGAGGCTT GGCAGCGGTC      240
CCGCCATTGA TCTGGAAGAA GTAAAGTCAG AATGTCTCGA G                        281
```

(2) INFORMATION FOR SEQ ID NO:288:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 421 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:288:

```
AATGGAAGTG CTGACACAAT ACTCGTGTA CTGTGTGGAA CCGCATAATC CCAGCAATGG      60
CACATTGAAG GAATGGAGGG AATCCAATAT TTCTGCCTCT GACATAATTT GGGAGAACCT      120
AACTGTGTCA GAATGCAAT CATTCGATGG AGAGTATGTT GGACGGGCCT GTGGCCATGA      180
TCACCCATAT GTTCCAGATG TTCTATTTTG GTCTGTGATC CTGTTCTTTT CCACAGTTAC      240
TCTGTGAGCC ACCCTGAAGC AGTTCAAGAC TAGCAGATAT TTTCCAACCA AGGTTTCGATC      300
CATAGTGAGT GACTTTGCTG TCTTTCTTAC AATTCTGTGT ATGGTTTTAA TTACTATGTC      360
CATTGGGATC CCATCTCCAA AACTACAAGT ACCAAGTGTT TTCAAGCCCA CTAGGCTCGA      420
G                        421
```

(2) INFORMATION FOR SEQ ID NO:289:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:289:

```

AAGCCAATGG CTGGTCGTGA TCCTGAATGC CAACGCACAG AAATGATTAA GAAAGAAGAA      60
GAACGTTTGA GGGCTTCCAT ACGTAGGGAA TCTCAGCAGC GCCGAATGAG AGAGAAACAG      120
CACCAGCGGG GGCTGAGCGC CAGTTACCTG GAACCTGATC GATACGATGA GGAGGAGGAA      180
GGCGAGGAGT CCATCAGCTT GGCTGCCATT AAAAACCAGT ATAAAGGGGG CATTGAGAG      240
GAACGAGCCA GAATCTATTC ATCAGACAGT GATGAGGGAT CAGAAGAAGA TAAAGCTCAA      300
AGATTACTCA AAGCAAAGAA ACTTACCAGT GATGAGGTAA GACCAAATTT ATTCAATTCT      360
AGGGGTTTAT CCTGTACTCA GGAGCCAACT GCTTTGAATG AAAAGCTCAC ACTCGAG      417

```

(2) INFORMATION FOR SEQ ID NO:290:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:290:

```

CAAGCATACA ATCAACTCCA AGCTCGGTAT CACCTGAGCC CAGGAAGTGG AGGCTGCAGT      60
GAGCTATGAT CAGTAAAACA CAAGACAGGT TCACTGGCTC CCATCCCAAC CCGGACCAGC      120
TCCCTAGTAT AACAACTCAC ATGCATGTGG ACTATACCCT TACAGCCTTC TTCTGTGTGT      180
TTATGTGCAT ATATGTAGCC ATAGGAAAAA AAATCAAAAT CCTTGTGTGT TCTTCTTAT      240
TTTTTCAAAT ATTTACCTG CCCCATTCTC TTTCTTTCT CCTTCTAGTA CTCCCATTCG      300
ATGCAGTTCT CGAG                                     314

```

(2) INFORMATION FOR SEQ ID NO:291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:291:

```

GTGTATGTGG GGGGTAAGTG TGTGTGTGTG CGTGTGCGTG TATGTGCACG TGTGTGTGT      60
GTGCGCCTGC ACACGGAGAG CCCACTCATA CGTAGCAGAA AATCAAATGG CCCCAAATCA      120
GAAACATGGC GCATGTGAGC ATGCCACTTC TTGTGTGCGT GTGACTGTTT AGAATGTACA      180
CGGCCCTGCA GTCCTCCGAG GCCAGCTCTG CTGCAACCCC TCCTGTGTCC AACACAGTCC      240
TCACTGGTGT CTTTCTCTCT TCAAATCTAC AGCATTCTG ATCTCTGCAA ACAATTAAAC      300
CCAAAACCAA GTTCTGGCTG ACAAGGCTAC ATCTGTGTTT TTGTGCGTGA TTAGCCTCGA      360
G                                     361

```

(2) INFORMATION FOR SEQ ID NO:292:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 237 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:292:

```
GCGATTGAAT TCTAGACCTG CCTCGAGTCG ATGCACCGAA AAGGGTGAAG TAGAGAAATA      60
AAGTCTCCCC GCTGAACTAC TATGAGGTCA GAAGCCTTGC TGCTATATTT CACACTGCTA      120
CACTTTGCTG GGGCTGGTTT CCCAGAAGAT TCTGAGCCAA TCAGTATTTT GCATGGCAAC      180
TATACAAAC AGTATCCGGT GTTGTGGGC CACAAGCCAG GACGGAACAC ACTCGAG          237
```

(2) INFORMATION FOR SEQ ID NO:293:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 292 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:293:

```
GAATTCGGCC TTCATGGCCT ACTTTATTTT TTTAATTATT ATTAGTATTA TTTTGAGACT      60
GAGTCTTGCT CTATCACCCA GGCTGGAGTG CAGTGAGCTG AGACTATGCC ACCGCACTCC      120
AGCCCCGGCG ACAGAACGAG ACTCCATCTC NAAAAAAAAA AAAAAAATCT ATGTTTCATGC      180
CTTNACACCT GTTCTGCAC ATAGCTGTGC AGTATATTCT TCTTCTAAGC AACGACCCAG      240
TGAAGATCCA AACAAAAGTT CACAAATATG TAGTTATCCA AGGCACCTCG AG          292
```

(2) INFORMATION FOR SEQ ID NO:294:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 136 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:294:

```
GAATTCGGCC TTCATGGCCT ACAATCTTTT AACTTTGGGG GTCACAGTTT TAGCCACCTT      60
TCGGGGGGTG ACTGGAGCAG TAGGAGGTGT GGGGTCATTT TATGAATATA ATAAATGGA      120
GCTGACTGTA CTCGAG          136
```

(2) INFORMATION FOR SEQ ID NO:295:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 264 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:295:

```

GAATTCGGCN TTCATGGCCT AAAATAACAC ACAATTAGTA TAGAAAAATT GCAAACACAG      60
ATAAAAGTCC TTTCCTGTG AATTTCTGAA TGCACCTTG AATATTCACA TCTTACTGCC      120
AAAATGAGAT TGTCTTGTGT GCCGTTCTGG AATTTGCTTT TTCCAGCTT ACATGTTCTA      180
GGTCCTTCCA GATCAATAGC TGCACCTCCT CCTTCCTCTG CTGGTTTCTC AGCTCGATGG      240
GCTGTAAGTG GCATTACTCT CGAG                                           264

```

(2) INFORMATION FOR SEQ ID NO:296:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:296:

```

GAATTCGGCC TTCATGGCCT ACAACCTCAT AAATCTCATT CTTAATTTCA CTCTAGGACA      60
GAATTATTGT AGCACCTGTG TTCTGTTATT TTAGATTCAT TTTAACTTAC CTAGACACGG      120
GTACTGTGGT AGTTGTAGAG GTACAGATGT TGAGTTCCCA TCCTCCTGGC TTAATGTCAC      180
TGGGGTTATT AATACTTTC ATAAGCATTT TAGGGACACC TGCTGTCTGC TCAACCCCA      240
GCAAACTCGA G                                           251

```

(2) INFORMATION FOR SEQ ID NO:297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:297:

```

GAATTCGGCC TTCATGGCCT ACATCTGGTA AATTTTCTT TCTGCCTGAG GAACACCCTT      60
TAGCATTAT TTAGTCTGCT GGTGACCAAT TCTCATATT TGTTGTCTG AAAAATACCT      120
TTATTTTGT TTAATCTTG AAAGATATTT GCACTGGTGT GATTGGATTC ATGATTGCTT      180
ATTATTTCT TTTCTTTT TCTTTTTTGA GACAGAGTCT CGTGTCGCC CAGGCAGGAG      240
TGCACTGGCC CGTACTCGAG                                           260

```

(2) INFORMATION FOR SEQ ID NO:298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:298:

```

GCTCTGAATC TATTTCTAG GACATTTTT TCCCATTTAG ATTAAGCCAG AGAGAGCCCT      60
TTCTTGCCCT CCAAGAGTTT TTCTTGTGT GACTGTTGGT ATTCTGAACC TCTTGGATTT      120

```

GATGCCTGGA ATTGTCCTAG AGACTCTCCT GATTTCTGTC TCATTCTTTG ATTTACCCCT 180
 GGGGAGCTGG GGAAGAGATA CCTTCCCATG GCATCACTTG TTAAGAGTGG ATCCCCCTTC 240
 CCCCTTTCCT TCTGTCCCC TCGAG 265

(2) INFORMATION FOR SEQ ID NO:299:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 311 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:299:

GAATTCGGCC TTCATGGCCT ACCAAAACAA AAGAAGAAAT CATTTCACTC ATGCTTAGAA 60
 AGATGTCAAG AGGATGGAGG ACTCACATTC TGTTAACTCT TCTGCCTGTA ATATATGCTT 120
 TAAACACTAA AAATGATGAG CATGAATCTG CAATTCAAGC CCTCAAAGAT GCTCATGAAG 180
 AAGAAATTCA ACAAAATCTT GCTGAAACAA GAGAAAAAAT ATTGCAGTAT AAAAGCAAAG 240
 TAACAGAGGA GCTAGACCTT AGAAGAAAGA TTCAAGTTT AGAATCATCA TTAGAAGATC 300
 ACAATCTCGA G 311

(2) INFORMATION FOR SEQ ID NO:300:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:300:

GGGATTGAAT TCTAGACCTG CCTCGAACTC GTGGCCTCAA GTGATCCACC TGCCTCACCC 60
 TCATCACCTG CCAAGTCCTA CCCATTCTAA CCCTGATAGC TCTTAAATCA GGTCTTTCCA 120
 CCTCAACCTC ATTATCACTG CTCTAGAGCT CAAGCCTTCA GTGTCCTTTC ACTTCCTGAA 180
 TTTACTGTCT TAGTGCTCTT GCTCACATTG TATTCTNTGC CAAAATGCT CTTACCACTC 240
 CCNTTCTTTC TCGAG 255

(2) INFORMATION FOR SEQ ID NO:301:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 345 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:301:

GAATTCGGCC TTCATGNCCT ACTTGGATTT ATCACAGTAG CATTTGTCTT CAATCTGTGT 60
 GTTAACTAGA AATCAAGGAA AGACATGAGG AGATTGTCT ACTGCAAGGT GGTCTTAGCC 120
 ACTTCGCTGA TGTGGGTTCT TGTTGATGTC TTCTTACTGC TGTACTTCAG TGAATGTAAC 180
 AAATGTGATG ACAAGAAGGA GAGATCTCTG CTGCCTCCAT TGAGGGAGAT CCGCACGCAG 240
 CTGGTGGAGC AGTTCAAATG TCTGGAGCAG CAATCAGAGT CGCGACTGCA GCTGCTTCAA 300
 GACCTCCAGG AGTTTTTCCG CCGGAAAGCT GAGATTGAGC TCGAG 345

(2) INFORMATION FOR SEQ ID NO:302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:302:

```

GAATTCGGCC TTCATGGCCT AATCCTCCAG ATTATTATGG ATATGAAGAT TATTATGATT      60
ATTATGGTTA TGATTACCAT AACTATCGTG GTGGATATGA AGATCCATAC TATGGTTATG      120
AAGATTTTCA AGTTGGAGCT AGAGGAAGGG GTGCTAGAGG AGCAAGGGGT GCTGCTCCAT      180
CCAGAGGTCG TGGGGCTGCT CCTCCCCGCG GTAGAGCCGG TTATTCACAG AGAGGAGGTC      240
CTGGATCAGC AAGAGGCGTT CGAGGTGCGA GAGGAGGTGC CCAACAACAA TGATCTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:303:

```

GAATTCGGCC TTCATGGCCT AAAAAAAGA AGTTTATTTA AAGAACTCT ATAAGAGCAG      60
CTTGGATTTT ATATCTTTAG ATCCAGAGTT TTTACTTTTC TGGAAATTA AATAATTGTT      120
TGGAATTTAC TCTTTATTGT TGAATTTTAA AGCGTGACTA AAGTAGTGCT TCTTAAGATA      180
ATTGTCATGT GTTTTGTGTT TGTGTTGTTT TGTGTTTGG TGCTGAGTGT TGCTCTGTGC      240
CTCAGACTGG AGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:304:

```

GAATTCGGCC TTCATGGCCT ACAATCCGA TAAAGTTTAA GGTCAGCTGA TGAAGAACAC      60
TCAAACCAAA GTCGCCCAT TGGAGGAGCGC CCTACCTCAC AGGAATAGGC CTGCATTATT      120
AGTATACCTT CTTCAATCAG TTATTGTTAT TCTTATGGAA ACAACCCATG GGAATGTAG      180
CCTTGGCATG ACTGTATCAA TGGATTGAGA GAGCAGTAGC GGGGACCCCC CCAGTCAATT      240
ACGTTCCACA GCAAGTCTCG AG

```

(2) INFORMATION FOR SEQ ID NO:305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:305:

```
GAATTCGGCC TTTCATGGCC TAAATCTCAT AAATAGAAAG NAAAAAATC TAGAAATTTT    60
TCAAAGCTAG TACTCTTTCT CCTTATAAAT GTACACAATT TTAATCTTTT TACAAATTTA    120
TTTAACTGTA CCTACTGTAC TTATTGTAGA TTCAATGACG CAGTTAAGTC ATCACCCTAAG    180
GATTTATGAA TTTGAGATTA CTGACCTGTT TTCTTCATAT TGCATTCACT TCAATATTTG    240
TGAATTTGTT GTTCAGCTTT TCATTCAAAC AAAAAATATT CCCCCAAGAA AACTCGAG    298
```

(2) INFORMATION FOR SEQ ID NO:306:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 263 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:306:

```
GCGATTGAGT TCTCCCTGCT GGTCTTTTG AATCACACCA AATGAATGGC TTGCTACTGT    60
TCCCTCACAC CTTCATATTG TCCATGGTTT TTCCACCTC CTTAGCTATA CAGCTGCTGT    120
TCCTCCTGCC TAAAATGTCT GAACATTCCC TCAGTGTTC GCTCAGCCCA CATCTTACAT    180
CTTCCCTAAG GATGTTTTTC TGCTGCTATC ATTCATTTTC TTCCTATGAG TTCCTCTGTT    240
ATATTGCGCC ACCAGAATC GAG    263
```

(2) INFORMATION FOR SEQ ID NO:307:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 267 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:307:

```
GAATTCGGCC TTTCATGGCT AGCCCCGACT AGCTTTGCCC TAACTCCTTC ATCAAAAGAC    60
CCCCCGCCAG CTTCACACAC CTCATACGCA GCCACATCTG CCCTATTCTC CATGCTTTCC    120
AGCTTGCCCTG CCCTTCTCA TCTCTCCCTG CCTGTGCAGA CCTCCACCTT TCTTCTCTCC    180
ACCCCTCCAT CCCCCTAATG TTGTAGACCT TCCATTCACT CCGTCTCATC GTGCGTGGTC    240
TCTGATCGTC CATCACCTGA CCTCGAG    267
```

(2) INFORMATION FOR SEQ ID NO:308:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 261 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:308:

GAATTCGGCC TTCATGGCCT AGCCAAAATC ACAAGAAAAA TAACTTTGAC TTGAAAACA	60
AATAAGTTAG AAATGCAGTG TTGCACTTC GTGGTTTATG TTGCTTTGG TGGCCTCTCA	120
TTCCCACTTA GCCTCAGTCT CCAGGGCCTG GGCTCCACCA AGGAAGACTC CATCTGCTCT	180
CTCTATTGC ACACTGGGAA CTTTTTCCC CAAGGTACAG GATATGATTC AGGGTTTATG	240
GATGACCTCC CACCCCTCGA G	261

(2) INFORMATION FOR SEQ ID NO:309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:309:

GAATTCGGCT TCATGGCCTA CCTATTCCA AACTTTAAAT GTTGTCTACC AAATACTGAC	60
AATTATGAAA ATTCTACCAG TAGAACACAC CTCCTTTTG AGCTCCAGAG CACATGCTTG	120
ACATCTCATA TTAGAAAGAA TCTTGATTTC CCCTCCAGTC TAGTCTTTCA TGTTTTGTTT	180
TTCTTTGTGA GAGTCTCCCT CAGCCTGCAA TGGCGTGATC TCGGCTCACT TCAACCTCCC	240
GTGCTCGAG	249

(2) INFORMATION FOR SEQ ID NO:310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:310:

GAATTTGTTT NAAAAAAAAA AAAAAAAAAA AGGGCNGGGG GGAAAAAAAA AAAAAAGAAC	60
TCCTGGAGAG GGAAATAGCA AATGTGCTT GCCTTTTGTT GCTCTCTCTC TCTTTTTTTT	120
TCTCTCGCTC TCTTCTTTC TCTCTCTCTC TCTGTTTTTA AGTCAAGCAT TGGTCTCGAG	180

(2) INFORMATION FOR SEQ ID NO:311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 742 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:311:

NNNNNNNNNN NNNNNNNNNN NNNNNNNANN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN	60
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN	120
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN	180
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN	240

```

NNNNNNNNNA NNNNNNNNAN NNNNNNNANN NNNNNNNANAN GNANNNNNNNN NNNNNNNNNN 300
NNANANANNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNC CCCCTTTGTC 360
ATNGTTNCG TTCCCNCTCT TCCTTGTTTC TTTTTCGGCA CAATATTTCAGTATACCA 420
AGCATACAAT CAACTCCAAG NTCGGAATTT TAATTACTTC ATGGCCTACT TGATGCAGGC 480
TGGAATGTTA TCCCTGGGGT GTGCTTGAC CCCACCTGCT TTCTTTCTCT CCTGCCCTC 540
CCCTACTCTC ACTGTAATTT ATGGACCTG CCCGCCTGCG TGTGTGTGT ATGTCCTGTG 600
CCTTTCTCA CTATGTTTG GGTGTGGAG GGGGTGGTTT TCACTGAAA AGGGGGGTAC 660
ACCTATAGCT TTCTGATGT TCAATCAATC AGTCACTGTG TCCAGACAT ATTCAATAAA 720
CACAGATTGG TACCATCTCG AG 742

```

(2) INFORMATION FOR SEQ ID NO:312:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 270 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:312:

```

GCGATTGAAT TCTAGACCCG CCCAGGAGC CTCCAGCTGC CTAACCACTG CCATCTTTTC 60
ACAACACGAT TTTCTACAAA TCTACAGCAC AACCGAGTTT GTAACCCGTG GGTAGTAGT 120
AGGACCGGGT TCGTGACTC TCTGTATCTC CTCTTAAGCT TCGTCCAGG TTCTTTATTT 180
TTGTCTGCTG CCAATGTCGT CTCGCATGCC TGCACCTCG CATGCACGCT GCCCGCATGC 240
CACGTGCCAC GCTGTAGCCA CATCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:313:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:313:

```

GAATTCGGCC TTCATGGCCT AGTTGATGTC CTCTCATATT TTGTTGTTTA AATACGCAGT 60
GTGGTGGTTG TTATTTAGGA CTGCCTCTGC TCTGACAGAT GTGTCTACTC TACAGAGAGA 120
GAGAGAGACT GTGTCTATTG TCCACCAAG CTGTCCAGAT CCAAACCTCA ATGACCTTTC 180
TGCACTCTGC CTGGCTATTG GTTACAGTTT ACATTCTACC TTCTCCAAG GTATTGAGGG 240
AGGCTTGCAT GCAATTCTCG AG 262

```

(2) INFORMATION FOR SEQ ID NO:314:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:314:

```

GAATTCTAGA CCTGCCTCTC CTGACACGGG CCACCAAACC CCTTACCTGG TTCCTTGCTG 60

```

```

TAAAACTTCA CCAAAATGAAG CCAGAGTTGA TCATGACCCT CTCGTGCTCG AATCCCTTCT 120
GGGCTCCCCT CTGCCCCCTG CAAAGCCAC ATGATACCAC AGAGAAGACC TGTCCCCTGC 180
AGGCCAGCTG CTTCAGCCTC TTCCCTCACA CACATCGTCC CGCACACGGC AGCCACCATG 240
GACTCAACAT CCCGACACA CGGTGCTGCC CTCTGCATGC ACCGACCCCC TGCCCCCTCC 300
ACCAGCTCGA G 311

```

(2) INFORMATION FOR SEQ ID NO:315:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 232 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:315:

```

GAATTCGGCC TTCATGGCCT ACCTAGGTGC TTTTAAAAAT ATTCAGACAA ATATCTATCT 60
TACATTGATT AAACCCGTGT AAATTCATTT GCAGTATCTA CATCGAATGT CAAAAAAGTA 120
TACTTATTTT TGTTCATAC TTATGTACAA TTTTTCCTT CTCAGGCTT TTTTATTAC 180
CTTTTGAAA AAGCACTTAC TCTCCCTTC CCTATCACC CATCCCTCG AG 232

```

(2) INFORMATION FOR SEQ ID NO:316:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:316:

```

GAATTCGGCC TTCATGGCCT ACAGTTGTTT ATACTTCCTT TACAAATATA AAGATAGCTG 60
TTTAGGATAT TTTGTTACAT TTTTGTAAT TTTTGAAATG CTAGTAATGT GTTTTCACCA 120
GCAAGTATTT GTTGCAAACT TAATGTCAAT TTCCTTAAGA TGGTTACAGC TATGTAACCT 180
GTATTATTCT GGACGGACAC TCGAG 205

```

(2) INFORMATION FOR SEQ ID NO:317:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:317:

```

GAATTCGGCC TTCATGGCCT AGGGCTTGTC TTTTTCATTG TTGAGTTGCA GGAGTTCTTT 60
ACATATTCTG GATACTAGAC CCTCATCAGA TATGGTTTTA AAATACTTTC TCTCATTCTT 120
TTCACTTTCA AGTATCCCTT TGATGCACAC ACCCAAAAAA GCAAATAGTG TCCAATTGCA 180
TTCTTTGATG AAGAAGAATA CAAGCAGTAA GTCAATTACA GCCTATTTTT TTCTTTTCTT 240
TCTTCTCTT TCTCTCTCTC TCCTTCTTTC TTTGAGGCAG GTAGGCCATG AAGGCCGAA 299

```

(2) INFORMATION FOR SEQ ID NO:318:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 95 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:318:

```
GAATTCTAGA CCTGCCTCGA GCTCCAGCTG CCAACACCCT TGGACACAAT ATTCCAGTCT 60
CCACTGCCCA TCTCATGTGG TTCAGGTTCC TCGAG 95
```

(2) INFORMATION FOR SEQ ID NO:319:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 109 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:319:

```
GATGCTTGGC TCACTCCCCG CTACTGGCCC CCAGACTTTT CCACCCAGG AAATGTCTCC 60
CCTGCCTGCA GCTTCAGCGA AAGCCCAGGA GGCAGGCCAA TCACCTGAG 109
```

(2) INFORMATION FOR SEQ ID NO:320:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:320:

```
GAATTCGGCC TTCATGGCCT ACACATTCT GTACCTGGAA AAAAAATGA TCTTATTTT 60
GATAATGGCT CTAAATCTT TAAACACACA CACAAATCG TTCTTTACTT TCATTTTGAT 120
TCTTTTAAAT CTGTCTAGT GTAAGTCTAA TATGATGCAT TTTAAGATGG AGTCCCTCCC 180
TCCTACTTCC CTCACTCCCT TTCTCCTTG CTTATTTTC CTACCTTCCC TTCCTCTGT 240
CTCCCCACTC GAG 253
```

(2) INFORMATION FOR SEQ ID NO:321:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:321:


```

GAATTCGGCC TTCATGGCCT AGGTTGTAAG TGAATTTATT TTTCTTTTC TATTTTCAG      60
TGTTCTGTA ATGCTTTCAT ATTTCTTTTG GTAGTTAGAA AATAAAGGCT AATTTTAAA      120
AAGAATATCA TAGTCTAAAA AATTAAAGGA TGCATAGAGT TCCCTCTTGA CTATGTGACA      180
TCTAAACTGA ATGAAGTGTG TGCCTGGCAC AGTGGAACAG CGCAGTCTCA GGATTCTGAC      240
AGATTTTGG ATCCCAGCTC TACCACTAAC CTTGGGCAGG ATTTTAGTCC CTCTGAGACC      300
TGCTTCTCG ATTGAATTCT AGACCTGCCT CGAG                                  334

```

(2) INFORMATION FOR SEQ ID NO:322:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 226 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:322:

```

GAATTCGGCC TTCACCTAAA TACTCCTCCT TTTGTATCAT TCAGCCTTTT GTTTTAGTTT      60
GGTAAGTTT AAGAAATTC AGCAGCAAAG TTGTTATTCA GTGGGCACGA TGGACTCCAA      120
ATGCCTCAAG TTATGTATAC CTGTGGAGGT CACGTACTTC CAAATTGTTT TCTTCCTCAT      180
CTTCTCCCTT TACCTGCAG CCCAGGTGCG CCAGCCGGGC CTCGAG                     226

```

(2) INFORMATION FOR SEQ ID NO:323:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 164 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:323:

```

GAATTAAAT AAACAAAGG CAGCCAAGGA TGAAAGGATT TAGTTCTAAG ATGTTTCACA      60
GTTGTGATT GTTTATTTA ATCCTTAGTA GTAAATTAGT ACTAGAAGGA TCAGGTATAT      120
CTTCCTTAAT TCTCCAGG GGAGAGAAAG TCCCATTTCT CGAG                     164

```

(2) INFORMATION FOR SEQ ID NO:324:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 494 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:324:

```

GAATTCGGCC TTCATGGCCT AAGCCTATGT TGATCTTGAA CTCTGGGCT CAANCCNTCC      60
TCCTGTCTCG GCCTCCCAA TTGCTGGAAT TATAAGCACA TTACACAGTG CCCAGTCTAC      120
CTACATTTTG ACAGACATAT AATATTCCAT GGCATGGTTA CATTATTGAG TTAAGAATGT      180
TCCCGGTTTT CTCTAAGATA ATGCTGCCCA TCTGTGTCTC ACTCTGGACA TGTAAGTAC      240
CTGCAAGAC TTGGACTGCT TGAGCAGAGG GCCTGCTTTT GTTTTTGTT CTTCTGCCT      300
GTTGTAACCT GATGCTGCCA AATGATCCTC TTAAATGATT GTACCACCTT CCCTGCCACC      360
ACCAGATTTT AAGGATTCTC TGTACCTCCC AACACATGAT GACATCATAC ATGAAAAGTT      420

```

TTGCCTGCCT GATGGAATAA TTGAGTCAAG AAATAGGATG CTAATGGCAT CTTGCTTAC 480
 CCGGTCTCCT CGAG 494

(2) INFORMATION FOR SEQ ID NO:325:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 295 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:325:

GAATTCGGCC TTCATGGCCT AGTTGGGTGT TGAGCTGAA CGCTTTCTTA ATTGGTGGCT 60
 GCTTTTAGGC CTACTATGGG TGTTAAATTT TTTACTCTCT CTACAAGGTT TTTTCCTAGT 120
 GTCCAAAGAG CTGTTCTCTT TTGGACTAAC AGTTGTCCTG ATGAATAAAT TCATTTCCT 180
 CAAGTTTATG ACACTCGGAA CGTCAAGAAC TGGAGGTTTG TGCAATTGA GACCGGTCGG 240
 CACTGTGCAG AGATCAGAGT ACTAAGAGAC AGAGATTAAA ATGGCTATCC TCGAG 295

(2) INFORMATION FOR SEQ ID NO:326:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:326:

GAATTCGGCC TTCATGGCCT ACAAGGATAG AATTCATTCC ACCTATATGT ACTTAGCAGG 60
 GAGTATTGGT TTAACAGCTT TGTCTGCCAT AGCAATCAGC AGAACGCCTG TTCTCATGAA 120
 CTTATGATG AGAGGCTCTT GGGTGACAA TGGGTGACCC TTTGCAGCCA TGGTTGGAGC 180
 TGGAATGCTG GTACGATCAA TACCATATGA CCAGAGCCCA GGCCCAAAGC ATCTTGCTTG 240
 GTTGCTACAT TCTGGTGTGA TGGGTGCAGT GGTGGCTCCT CTGACAATAT TAGGGGGTCC 300
 TCTTCTCATC AGAGCTGCAT GGTACACAGC TGGCATTGTG GGAGGCCTCT CCACTGTGGC 360
 CATGTGTGCG CCCAGTGAAA AGTTTCTGAA CATGGGTGCA CCCCAGGGAG TGCTCGAG 418

(2) INFORMATION FOR SEQ ID NO:327:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 588 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:327:

GAATTCGGCC TTCATGGCCT ACAGACATCT AATCGGAATC TTGCTCTTGT TGCCAGGCT 60
 GGAGTGTAAT GGCACAATCT CGGCTTACTG CAACCTCTGC CTCCTGGATT CAAGTGATT 120
 TCCTGCCATCA GCCTCCCAAG TANTCTGGAT TACAGCCCTG AAAACCACTC GCTTGCAGAG 180
 CGCTGGATCA GCAATGCCTA CTAGTTCTTC ATTCAAACAC CGGATTAAAG AGCAGGAAGA 240
 CTACATCCGA GATTGGACTG CTCATCGAGA AGAGATAGCC AGGATCAGCC AAGATCTTGC 300
 TCTCATTGCT CGGGAGATCA ACGATGTAGC AGGAGAGATA GATTCACTGA CTTTCATCAGG 360

```

CACTGCCCCCT AGTACCACAG TAAGCACTGC TGCCACCACC CCTGGCTCTG CCATAGACAC 420
TAGAGAAGAG TTGGTTGATC GTGTTTTTGA TGAAAGCTCA ACTTCCAAAA GATTCCTCCA 480
TTAGTTCATT CCAAAACACC AGAAGGAAAC AACGGTCGAT CTGGTGATCC AAGACCTCAA 540
GCAGCAGAGC CTCCCGATCA CTTAACAATT ACAATGCGGG AACTCGAG 588

```

(2) INFORMATION FOR SEQ ID NO:328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:328:

```

GAATTCGGCC TTCATGGCCT ACGACTGGGG GAAATGTCTA TTCTCCTGTG TATCTCTGGG 60
CTTTTCTTGT TTTTGGCTGC CTCCTGCTCA GTTCCTCTCT TTAGGTATTT AGTAAAGCGT 120
TCATGTAATG TCATTCTCTGA GGACCCAAAG TGATGCTCTT TAACATGGTG AACATGGTC 180
ACTATATGTT GGGCAAACAG TTCTGAGGGG CTACGCTGAG ACTGAGCTGA TTGTATGTGC 240
TGGAAATGG AACGAACTC CTGTTCTTTT TTGTTGCTAT GGACTAGATC TCGGCAAAGC 300
TTGCGTTCCT GAGCCAATAA GCCACTGGGT CGTGCAGGT CCTCATCAA AGAGTCCATC 360
CGGACATGA CCTGTGCTC TCGAG 385

```

(2) INFORMATION FOR SEQ ID NO:329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:329:

```

GAATTCGGCC TTCATGGCCT AGCAGTTCAC CACTGCAAAA CCACGGGGCT GCGTGGAGGT 60
ATTTCATGGGA CACCGAGTGG TATCACTAGC AGCGGACTCT GCATGCTTAC TTAGAGCATA 120
AAAGGATAGC ACCCTTGGCC ATTGCCTGAC ATGAACTCAG TTTGGAAATT GCAGAGGTGT 180
GGAGAGCCAT GGATGGGTTT TATAATTTAT TCTAATGTAA TCTCTGTGCT AAAGGCTGTT 240
TGAAAAAAT AATGAAGTTG ATGTTGCTTA AGTTATATGC AAATGTAAAC TGGTCTTCCT 300
TCAAGATGTT TGAATGGAA TGAATGCCCT TCCCCTGGGT ACCTCCCAAT ACCTACCTC 360
AAAAGAGCTC CAGTAAGGCT TCCTTATCTT TCCTTGCCCT GCTTCCTACA CTGCTGCTGC 420
AGGTGTCTCT GGGTGATTGT GGGGAAACC ACTGTGGTTA AGCACCAACA CCAAGACTCG 480
AG 482

```

(2) INFORMATION FOR SEQ ID NO:330:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:330:

```

GAATTCGGCC TTCATGGCCT AAGGCCTTGG TGCCCTGTGG GTGGACTCTG GGGAGGCCAG      60
GGGCCCAAGG CCACCTTCTA GGGCCTGAGG AGCCCTCTGA GACCTGCACA CCCACCCAG      120
GGAGCGCCCC TCCCTCCACC TCTGTGCCCC CCCAGTGACT CTGGAACCTC TGTCTGTTT      180
GCAGATTCAT CCGGAAGGGC CGCCAGCCAG TGGATTTCCT GGGCCCTCAG CCCTCTGGAG      240
TGACGAGTT TTGGAGAAAC CTCTTCTCT GTATATGCTT TTGACTTCC TGGACTGATG      300
TAAAAAATACT CTTTCTTTG ACCTGTTTAT TTTTAAGACA CGACGTGATT GTGTCAGCTT      360
ATATTTTATT GCTGAAGTAA ATTTCAAAT GTTTATTAG TTTTGTGA TCTTGTCTG      420
CTCATTTTGG AGTTTGTGTA ATTTGATAG GTGTTCTTT ATGCTTGTGA TTGTTTCTT      480
AATGACTTTT ACCTTAGTTT TTAACAAACC CATAGTACAG TGTACCCTCG AG      532

```

(2) INFORMATION FOR SEQ ID NO:331:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:331:

```

GAATTCGGCC TTCATGGCCT ACATTTTGG AAAAAAAAAA ATCTACTTTG TGTATGTGTG      60
GGGTGTGGGG TGTGAGAGAT ACATTCCTTT TTNGTGTCTA AATCTCACAG TCCACATATG      120
ACTTCCCCA CTTGAGAAAT CTCTCTCATC TGTGTGGCTC CCTGCATTCT ATAAAAATAT      180
AAATAAATAA AATTTTAAAA AGTATAAAGC CGGTGCCATG AGACCCTTGG GTTGGGCAAA      240
GCCTGTGAAG TTTGAACCGG TTAACGCACG AATACAAGGG AGTGATTATT ACAAGGCCAT      300
CCCGCTTAGC ATCGGGGAAT CATTGGGGA GAGAGATTCA ATTCATAAA GATGATTTTC      360
AAGGGCTGTC TCGAG      375

```

(2) INFORMATION FOR SEQ ID NO:332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:332:

```

GAATTCGGCC TTCATGGCCT ACACGCGGTC AACTCTGCAG GGCTGATGAT AAACATGCCT      60
CTTCTCCTAT TGTCTTCTC CTCTCTAAAG CAAGGTCATT TCTGTGCTCG TCAGGCAGTG      120
GCAGGGGTTG GGAGGAGGAG AGAGGAAAC ACTGTGGTCA GGCTCTGGGG AGAGTTGACT      180
ACAGTGTAGC TCTTGGATTA TTTATGAATA TTGCCCTCAG ATTTATTTTC ACTCTGCTCC      240
TTCCATTCAT ATTCCAGAG ACAACCAAGA GCCGACTGTA GAAAAGACT TCCAGACACC      300
TAGAATATAT ATCAATAGAC ACTGTTTAAA AGGGGAGACT CGAG      344

```

(2) INFORMATION FOR SEQ ID NO:333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:333:

```

TGGCCTAAAG GGGGTGGGTA CTCCGGTGGG GTAAGGTCAG AAGGTCCTG TGCAGGGAGG      60
GACTGGTCCC TTGAGAAGGA ACAGAGGGCA AATCCTGAAG AGTCCTGGAG GCCCAATGTA      120
GACAGCAGAA GCTGGGAGCT GACCTAGGAG TGATCGGGGG CCTGATCCAG ACAGGACAGA      180
CACAGGCTGA CACCGGAGAG TCCCAGGTGC CAACATGAAC AGTTAAGGCA GGGGCTGACC      240
CCAAAGAAAT CAGGGGCCCCG CAGCTGACCC CGGAGGGTCC CAGGTGCCGA CCTAGACAGC      300
AAAGGCAGGG CTGACCCAG AGGGTCCCGA GCCGACCCAG ACGACACAGG CAGGCTGAT      360
CCCGGAGGGC CCCGCCCGA CCCGACAGG CAGTGAAGGC ACAGGCAGGG CTGACACTCG      420
AG

```

(2) INFORMATION FOR SEQ ID NO:334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:334:

```

GGGAACGAAA GATGGCGGCG GAAACGCTGC TGTCCAGTTT GTTAGGACTG CTGCTTCTGG      60
GACTCCTGTT ACCCGCAAGT CTGACCGGCG GTGTGGGGAG CCTGAACCTG GAGGAGCTGA      120
GTGAGATGCG TTATGGGATC GAGATCTGCG CGTTGCCTGT CATGGGAGGG CAGAGCCAAT      180
CTTCGGACGT GGTGATTGTC TCCTCTAAGT ACAAACAGCG CTATGAGTGT CGCCTGCCAG      240
CTGGAGCTAT TCACTTCCAG CGTGAAAGGG AGGAGGAAAC ACCTGCTTAC CAAGGGCCTG      300
GGATCCCTGA GTTGTGAGC CACCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:335:

```

GAATTCGGCC TTCATGGCCT AAAACAGATA ACGCTATAGA GAAACACTG TTTACTGAAC      60
AGTGCTTTGA AACCACGAGG GTGATCAGAG CCCCATTTG CCTTCTAGAG ATAAACCTGT      120
CTCCCTTCCT GCAGAGCTAG CTCTCCTAT TGCTTCTGGT TGTCGTTTGT CTTCACTCTG      180
CTTCCTGCCA GTGCAGCAGC TCCTGCTAGA TCTTGACATC CTAGTGGCCA GATCCAGGG      240
GCGGTGCTGG TCCTATCCGA GCTCTCTGCC TCATCTCCCA TTCCTTTTTT CCACACTCAG      300
TGTGTATTCT CTTGGATTTC CATACCCTGT TCCTCCTACC ATCCACCTCT CTACCTCATC      360
TCCCGACCTG CCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:336:

```

GAATTCGGCC TTCATGGCCT AGCAGGTCAG GAGCCCGGGG AAGGCCCAGA GGTACTCCAA      60
AGGGGGCCCG CTGGTATCTG AAGGCCCTT GCAGTTAGTG TGTGTGTGAG CTGTGGGCAT      120
GAACATGCCA CAGGCAGACA CTGTTTAGCC AGGGTTTAA GAAACACGGA GGTCTCTGTG      180
GATCTGGAGT TCATTGTCA GGACAGGGAT GGGGACCCCT CTGAAGTAT CACTGTGGGC      240
TGAGGGGTGC TGGCCACACA ACCTCTGTGG GAGGCATCTC TTGCAGTGAA GCTGTTGGTC      300
CTCAGTTCAG TGCCCACTGA GGGTAACCAG GCCCCAGCTC TGCACCCCA CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:337:

```

GAATTCTAGA CCTGCCGAG CACAATCCCG TGGACAGAGC TTAATCCATC TAACTCGTTT      60
TCAAGTGCAAT GATTTCCTT TTCACCTTTC CTTTTCCTT ATTATGTTGC TTAAGTGTA      120
CAGTGGCAAC TGAAATGCAT TTCAGAAATA GGAGGTTTCG TCCAGCACCC TCTGCAGCCT      180
TGGTGCCTGT AGCTCTGGAC TTCCCTGGGC CTTTCCCTGT GGGAGGGCCC TGTAGACCAC      240
ATCAGGGTGG GGTGGGGGTC ACTTGGCAAA AAGGGCCGAG GTCTGGTGAT GTGGTCCCA      300
GGATCTGGAA CCTCTCCAC CCCTCCTGCA GTTGGACTGA ATTCTCCCT TTATCCGAA      360
GAAACCCACT TGCTGTTCC AGCCAACG AG      392

```

(2) INFORMATION FOR SEQ ID NO:338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:338:

```

GCAAGATGGC GACCGAGACG GTGGAGCTCC ATAAGCTAAA GCTTGCCGAA CTAAGCAAG      60
AATGTCTTGC TCGTGGTTTG GAGACCAAGG GAATAAGCA AGATCTTATC CACAGACTCC      120
AGGCATATCT TGAAGAACAT GCTGAAGAGG AGGCAAAATGA AGAAGATGTA CTGGGAGATG      180
AAACAGAGGA AGAAGAAACA AAGCCCATG AGCTCCCTGT CAAAGAGGAA GAACCCCTG      240
AAAAAAGTGT TGATGTGGCT CTCGAG      266

```

(2) INFORMATION FOR SEQ ID NO:339:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:339:

```

GAATTCGGCC TTCATGGCCT AAACAATGAA TAAAGCCAAG CCAGTTCCTG CCCCCGTGGA      60

```

```

GCTTGTAGTC AAGACATTGA ACAAGTGATC AGAAAGATGT TGACTGCTGC AGCAGAGGGT      120
TGCAAGCTGC TCATGAGTAT ATAACAAGTA GCCCTAACCA AAGCATTCTC TCCCTTGGTT      180
TAATGTCCAC CCATTGAGGT GACTGCTAAA TACTAATCCA TGACTCTATC CCTTGGCATT      240
CAAACTCACA CATCCACTTA CCTGCCTCTC CAACCTCCCT GCCTCGAG      288

```

(2) INFORMATION FOR SEQ ID NO:340:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:340:

```

GAATTCGGCC TTCATGGCCT AGTCTCTGCC ATGTTCTAAA CTGAAAACCT CCTAGTCAAC      60
TTCACACTTT ATTCCCTGAT CCTCAATTGG TTCCCATGTC CCGTTAGTGT TTCTTGTAAG      120
CCTCTGCCAC CACCGCAGAT CGAACTCTAA TCACATCTCA CCTGAATTAT GGAAAAGTCA      180
CCTCAATTCT CTCACCATC CCAGCCTCCA CTATGGATTA ATATGCCTAA AGCAGAGCTG      240
ACCAACAACG TGAGAAGAAT CTGAGAGGGA AGCAGCAGCA AACACAAGAG TCACTGGACA      300
TGCATGCCTC GAG      313

```

(2) INFORMATION FOR SEQ ID NO:341:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 284 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:341:

```

GAATTCGGCC TTCATGGCCT AAGAAAAAAG GATAGACAAA TAGTATTTTT GTGATTTTAC      60
AGTAGCTTAA AACTATAGGA TTTTTTTTCC CCATTACTTT GCAACAACCTG ATACTTTTGA      120
CCAGTTCTCT TTCTTAAGCA TTTCTCTCCT TGAGCTATTA CCCAAATTGT CCTAGTCTTT      180
CTCTGCTTGT CCTCAGCTA TACACAGTCA CTGAGGCTCT GTGCTTGGCT TCTGTTCCCT      240
TCTCCTCATA GGGATTCCTC ATGTTGGAGT TCATCAAGCT CGAG      284

```

(2) INFORMATION FOR SEQ ID NO:342:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 315 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:342:

```

GAATTCGGCC TTCATGGCCT ACCACGATAG ACCAGCTGTA GCTCATTCCA GCCTGTACCT      60
TGGATGAGGG GTAGCCTCCC ACTGCATCCC ATCCTGAATA TCCTTTGCAA CTCCTCAAGA      120
GTGCTTATTT AAGTGTTAAT ACTTTTAAGA GAACTGCGAC GATTAATTGT GGATCTCCCC      180
CTGCCCATTT CCTGCTTGAG GGGCACCCT ACTCCAGCCC AGAAGGAAAG GGGGGCAGCT      240
CAGTGGCCCC AAGAGGGAGC TGATATCATG AGGATAACAT TGGCGGGAGG GGAGTTAACT      300

```

GGCAGGGCAC TCGAG

315

(2) INFORMATION FOR SEQ ID NO:343:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:343:

GAATTCGGCC TTCATGGCCT AAAGATGTTA GATATTACAA TTTGACTGAA GAACAGAAGG	60
CGATCAAGGC CAAGTATCCG CCAGTCAATA GGAAGTACGA GTGTGAGAGA TGACTTACAG	120
TCTCTTCTGT TTCACTTTTT GGATGAATGG CTTTATAAGT TCAGTGTCTGA TGAATCTTTC	180
ATACCCCGGG TGGGAGAGAAG AATTTTCATT GTCCAAGCAC CCTCAGGGAA CAGAAGTCAA	240
AGCAATAACA TATTCAGCAA TGCAGGTCTA TAATGAAGAG AACCCG	286

(2) INFORMATION FOR SEQ ID NO:344:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 545 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:344:

GAATTCGGCC TTCATGGCCT ACCTCTGTGA AAATTTAATT TTTTATATCC TGATTAATAT	60
ATTGTGACIT TAGGCCCAAT TTTCATGTGC TTCACTTTGA TAGAGTTAAT CCATAAAAT	120
GCTCTTTACT TTAGCTTATC AAATGAAGTA TTATTTTGTG GACTGGAGGC CAAAAAGTCA	180
ATGTGAGCTT CTCACAGGTT TTAAAGCTC CACTAAAAAT AATTATCCAC TTGTCTTTAC	240
TTTTGTTGAC CAGAATAGTT GGTAACCTCG CCAGAGCCTG TACTTACCTG CCAAAAACAA	300
TTAAATCTGG TTAATGCCTG AAACCAATC TCTCAGTCTC AAGTGTATATA CTATCCAAGT	360
TTAAATGGA AAGGTAAACT GTGGAGTAAT GAAATTTTGG TTTTACTGTA CCTTTTGCTA	420
TCAAGATAAT ATTCATGTTT GAAATCTTGT CTTTATTTGG AATTTAGTTA CTGTCTGCTT	480
TTAACCTTTG CTTTCCTAAA GAAAGTTTGA GATCCAGAGA GTTCAAGGGA TCGGGGAGTC	540
TCGAG	545

(2) INFORMATION FOR SEQ ID NO:345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:345:

GAATTCGGCC TTCATGGCCT ACAATAAGTG TGTATACCT GCTTTGGTGA TTGCAATCAG	60
CATGGGATTT GGCCATTCT ATGGCACAAT TCAGATTCAG AAGCGTCAAC AGTTAGTCAG	120
AAAGATACAT GAAGATGAAT TGAATGATAT GAAGGATTAT CTTCCCACT GTCAACAGGA	180
ACAAGAATCT TTTATAGATT ATAAGTCATT GAAAGAAAAT CTGCAAGGT GTTGGAAGT	240

TACTGAAGCA GAGAAGATGT CCTTTGAAAC TCAGAAAACG AACCTTGCTA CAGAACTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:346:

GAATTCGGCC TTCATGGCCT ACACATTTTG ACAGCTTCCT TTCAGGTTTC TTGAGCTCTC 50
AGAAAAATTA GAAGGAAGTG GGCTGGGGAT ATAGAGAGAG TCCAACTAC CAACTAATGA 120
ATGAATCTGA AGGAGACACA GAAGGGCAAG TAGAGTTTAG AGTTTGAGAG TGCAGGAAAG 180
TTTTGAAATG GTCAGAACTG CCAGAGTAAT TTCTGAGATC TTACTAAGCA CTCTCCCACC 240
GTTTGCCTTA AAGATACCCC TTCCCCCAAA TTGAAACATC ACAAATCTGC AGAGCTCTTT 300
AATCAGGTGT GTTATACACA ATGAATTAA TTCTCTTATT GCCCTGGAAG AAAGATAAAC 360
CAGATGTGGC CCTTGCCCTT TTTCAGTAAG TATTGTAG ATCTTCATTA CATTTTAGGC 420
CTCCTAGGCC ATGAAGGCCG GCCTTCA 447

(2) INFORMATION FOR SEQ ID NO:347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:347:

GAATTCGGCC TTCATGGCCT AAAATTCGGC TGATTTCCCC CTTGGCTAGC CCAGCTGACG 60
GAGTCAAGAG CAAACCAAGA AAAACTACAG AAGTGACAGG AACAGGTCTT GGAAGGAACA 120
GAAAGAACT GTCTTCCTAT CCAAAGCAAA TTTTACGCAG AAAAATGCTG TAATTTCTTG 180
GGAAGATTTT AATGTACACC TATTGTAAA STCATCAGAA TAGTGTGGAT TATTAAATAT 240
CTAGTTTGA AGAAAATAAT TTATATAAAT TATTGTAAAT TTTTATGTAA ACTCGAG 297

(2) INFORMATION FOR SEQ ID NO:348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:348:

GAATTCGGCC TTCATGGCCT AGAATAAAAC AAAGCCTTTT CTGCCTTTTA CATTCAAGTC 60
AGTAACCGTC AACACCCAC CCATATACTC CCATACCATG AGGTGTAATT TTCAAACCTC 120
TCGCATACTT TTAATTACTA GTTTAATTAT TTGCCTTCTC ACTGAGTCTA TAATCTCACT 180
TAGGGTAAGA ACAGAACTCA ATTACAGATG CTCAGTAAAC ACTGGAAGGC CGCGGCTCGA 240
G 241

(2) INFORMATION FOR SEQ ID NO:349:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 172 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:349:

```
GAATTCGGCC TTCATGGCCT AGGGCTGCCC AAGATTGTGA AAGGTAAGTA GTATCTTTAT      60
TTGGGGGTAA CTTAATTATA GATAAAAGAT GGTCCAATAC TGGAAACTGT TCGTTTCTTC      120
CCTTGATCT AGTCTTCTTC TGCTTTATAT AGAATCCCAC CATCATCTCG AG              172
```

(2) INFORMATION FOR SEQ ID NO:350:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 253 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:350:

```
GAATTCGGCC TTCATGGCCT ACACGTGACA GCCTTTCCT TTTGATCA CCTTCCTCAC      60
ACTGATGGTC TCATACAACA TCATTTTGAA TGTCCTCAGC TCTCTGCACC ACCCACCCTAA      120
CTCCACTCTG GGCCACCGCT GGTGTATCCA AGATCAGGAC ACCAGTCCCT GGGCACCAGG      180
GAGTATGCTG GCCACTGAAG CAGCTTCGTT TTTCCGGCAC CCATGTTGTA AAATCGACTC      240
CCCCAACTC GAG              253
```

(2) INFORMATION FOR SEQ ID NO:351:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 240 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:351:

```
GAATTCGGCC TTCATGGCCT AGAAAGTTTA AAGATTAGCG TACTGATTAT GATGGGATTT      60
TTACTGAAAA TTAGTTTTGT CAGGCTGCTT GCTTGCTGT GTATTTTCTA TTCTAATTTA      120
GTTTTTATTT TTATCAAAGC TGTATTTACT TATAATGTAA AAAGTCAATT AGTTTTCCTAA      180
GGCTTATTAT GGAAAACAGT AGTTCCCCAG GCTCCCATCC CTATGTCCAA CAAACTCGAG      240
```

(2) INFORMATION FOR SEQ ID NO:352:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:352:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CTAAGCCTTT GATTATTCAG CTGCCACTGC      60
CTACAGGCCT TCTCCCATAT TCCTTCCTTC TTGCTAAGTC TGACTTAAAC TAGGCTTAGG      120
CACCAACTCC TATAGGAAGC CTTCTTGAA CCTGGCCCTC TACTTTTCAC TCACTGACTA      180
CCACTCAATT AACTGAACGG TGAAAAGTAA CCCACAGCTA CGCATTTCATG CAGACAACAG      240
AATTTTACTA CTTCTTCTCA CTA CTGGTTC ATATTCTGTC AACCAGAAAA TATCATTTC      300
TCCCTAGTAA CTATGGCTTC CATCTGTTAC TTCC                                  334

```

(2) INFORMATION FOR SEQ ID NO:353:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 92 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:353:

```

GAATTCGGCC TTCATGGCCT AATAATGACT TGTTGGTTGA TTGTAGATAT TGGGCTGTTA      60
ATTGTCAGTT CAGTAGGCCA TGAAGGCCGA AG                                  92

```

(2) INFORMATION FOR SEQ ID NO:354:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:354:

```

GAATTCAGTT CTTTATATAT TCTAGTTATT AATCCCTTAT CAGGTGGATA GTTTCAGAT      60
ATCTTCTCCC ATTCTTTAGG TTGTCTCTTC ACTCTGTTGA TCGTTTCCTT TGCTCTGCAA      120
AAGCTTTGTA GCTTGAGATA ATCCCATTTG TCTGTTTTTG CTTTGTGTC CTATGCTTTT      180
GAGGTCTTAC TCAAAAATT TTTGCCCAGA CCAGTACCCT TGAAGCATTG CCCCAATGGT      240
TTTTTTTTTT AGTCATTTC TAGTTCAGGT CTTACTCGAG                                  280

```

(2) INFORMATION FOR SEQ ID NO:355:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:355:

```

GAATTCGGCC TCCATGGCCT ACATAGATGG GCACACTCAC ACACAGAAGT GTGCTTGATC      60
AATCACCACA CAGCACAAA CACACACACA CACTAAAAAT ATAAACACA TCGCTCACAT      120

```

```

GGGCATTTC AATGATCAGC TCTGTATCTG GTTAAGTCGG TTGCTGGGAT GCACCCTGCA 180
CTAGAGCTGA AAGGAAATTG GACCTCCATG CAGCCCTGAC AGGTTGTGGG CCCGGGCCCT 240
CCCTTTGTGC TTTGTATCTG CAGCTCTTGC GCCTTTTATA AGTCCATCCT AGTCCCTGTG 300
GGATGGCAGG GGGCTGGATG GGGGGCAGGA CTAATACTGA GTGATTGCAG AGTGCCTTTAT 360
GAATTCACCT TATTTTATCG AAACCCATTG GACTCGAG 398

```

(2) INFORMATION FOR SEQ ID NO:356:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:356:

```

GTGTCAGAGC AGGCATTTC CAACCTAAGG AAATCTTTGT TTTCAAATAT TAGGGTTTTT 60
TTTTAATTGT GGTAAAGGA TTTGGACAT GCTTTGTAAA TTGTTAGTAA AAGGACCTAT 120
TTTCCACCTG TATTCTAAGT TATTTTTCCT CCTCTTTTG AATTTTTCAG GTCAGCCCTT 180
CATAAACCCA GATGGGAGTC CAGTTGTGTA TAATCCTCCT ATGACTCAAC AACCAGTTAG 240
ATCCCAAGTG CTTGGACCTC CACAGCCACC TCTGCCAGCC CCACCTCAAC AACCAGCAGC 300
TAATCACATT TTCTCACAGG CGCATCTCGA G 331

```

(2) INFORMATION FOR SEQ ID NO:357:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:357:

```

GCTGCCTCGA GGTCTCCAAG ACTTTTTCAT CTCGTATCGT TTCGGGATCC GATCCATAC 60
TTTTATTTTC ACTTCTTCCT TCTTCCTCCT CGAACTCCTC GTCGCCATCC TGTCTGCCCA 120
GCTTCCCGTA GCCATCCTCG CCTTCTTTCT CGTGCTCCTT CTCGCTCTCG CCATCCCTCG 180
GCATACTCTC CCTTTCCTC TCGAG 205

```

(2) INFORMATION FOR SEQ ID NO:358:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:358:

```

CAAAAGAGAT GGTACCAGCA AGAGATTAAT ACTAAAGAAA TGCAGTCAGA TTTTAAAGAA 60
ACTGGAAGAA GAGCCATTTC TCCCAGGGAG AAGATTCTAG ATGTGATTGA TGACACCATA 120
GAAATGGAGA CAGGTCTGAA AGCAATGGGA AGAGAGATTG GTCTAAGGGA GAAGACGCCA 180
GAGGTGATTG ATGCCACTGA GGAATAGAC AAAGATTGGG AAGAAGCTGG AAGAAGAGAA 240
ATATCCCCAC AGAAAAATGG CCCAGAGGAG GTTAAGCCTC TAGGTGAAGT GGAGACAGAT 300

```

```

TTGAAAGCAA CTGGATATGA GAGTTCCTCA AGGGAGAAGA CACCAGAGGT GACTGATGCC      360
ACTGAGGAAA TAGACAAAAA TTTGGAAGAA ACTGGAAGAA GAAAAATATC CCCAAGGGAA      420
AATGGCCCGAG AGGAGGTCAA GCCTGTAGAT GAAATGGAGA CAGATTTGAA CGCAACTGGA      480
AGAGAGAGTT CTCCAAGGGA GAAGACACCA GAGGTGATTG ATGCTACTGA GGAAATAGAT      540
TTGGAAGAAA CTGAAAGAGA AGTATCCCCA CAGGAAACT CGAG                          584

```

(2) INFORMATION FOR SEQ ID NO:359:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:359:

```

GAATTCGGCC TTCATGGCCT ATGCTTCTG AATTGGCAAG ATATCCAGG CTTATTTGGC      60
ATTTCATCTTA CTCTAGACCT ATTATCAACC ATGTCTCCAA GGATAAGTAG ATCCTTTTAA      120
GGGAAATGG TATTTTGAAA GCATAGTGTG GGATCTGAGG ATACCTATTC CTGTCAGGTT      180
GGTTATTGTT TGTTTTCAGT GAGTAGATCT TGGACTTTAT TAATTTTATT TATTTATTTT      240
AAGAAAAGTA CATCATGAGT TATAAGTAAT AATTCCAAC TCAAATTTAA TATTGCTTAA      300
CTTCTTTGAT TTTATATTTA TCTTTTACAC TGAAAAGTCT CGAG                          344

```

(2) INFORMATION FOR SEQ ID NO:360:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:360:

```

GCGGGTGGAC AAAATGAAG CCAATGAAGA AGGCATGCAC TGGCCTTTCA GGTCTGGCA      60
GTGGCAGCAA GTCCCCCCA GCCACCAGG CCAAGGCTCT GAGGCGGCGA GGGGCTGGG      120
AGGGTGACAA GCCAGAGGAG GAGGATGACG AGGCACAGCA GCCGCAACCA CAGTCCGGGC      180
CCGAAGAGGC TGAGGAAGGG GAGGAGGAGG AGGCTGAGCG GGGCCCTGGG GCTGAAGGTC      240
CTCCACTGGA GCTGCACCTT GCGACCCCG CTCCAGGCC AGCAGAGGAC CCCAAAGGGG      300
ATGGGGAGGC AGGCCGCTGG GAGCCCTCAC TCAGCCGCAA GACAGCCCG TTCAGTCTCG      360
AG

```

(2) INFORMATION FOR SEQ ID NO:361:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 378 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:361:

```

GCACCACCTC TTGCACTGTG AGGAGTTTAT TGATGAATTC AATGGGCTGC ACATGTCCAA      60
GGACAAGAGG ATCAAGTCAG GGAAGCAGTC CAGTACCTCC AAGCTGCTGC GTGACAGTCG      120

```

```

AGGCCCCGTCG GTTGAGAAAC TGTCCACAG ACCTTCAGAT CCTGGAAGA GCAAGGGGAC      180
CTCCCATAAA CGGAAGCGAA TTAACCTCC CTTGGCCAAG CCAAAAAAG GGTATTTCAGG      240
CAAGCCCTCT TCAGGAGGTG ACAGGGCCAC CAAGACGGTG TCTTACAGGA CTACCCCCAG      300
TGGTTTGCAA ATAATGCCCC TGA AAAAGTC TCAGAACGGG ATGGA AAATG GGGACGCCG      360
CTCTGTAAGG ACCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:362:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 266 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:362:

```

GATTGTATTG AAAGTCAGAC ATAGGTGTGG AACCAATTAT GGGAGTGAGG ATAAGTCTAG      60
ATTTGGGAAT CAGTCGAGA GAGGTGACG ATGAAAGTCT GAGAAGAAAG GATCTTGCTA      120
ATGGAGTGAA CTCAGAGCTT GATAAAGGGA GGATGAGTGG AAATGGAGCT CAACGCTGTG      180
CCTTGGGAAA TACCTCTGTG GATTGGTGGG AGCACAGTGA GAAATTC AAGACACAG      240
ACAATGGAAT AACCAGAGAA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:363:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 367 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:363:

```

GAATTCTAGA CCTGCCTCGA GCATTGCCCC CGGCCTAAGA AGCTCTCTTA TCTTGCATCT      60
TGGGCTGGAC TCCTACAACA GCCACAATT CCGTGCTGGT CTCCAGCTT CTAGCCTTCC      120
CCCATCTCCT GTCGTTTTCG ACACAGCAGC CAGAAGGATC CTTTAAAAAC AGAGGTGAT      180
CCTGTCTGTC CTC AAAATCC TCCAATGCTT TTCCTACTGC ACTCAGAGTA AAAGCCAGTC      240
TCTGCCTTAG ATGCTCTGGG ATCCTGTACC CTCCTTGGTC TCATGTCCTA CAATCTGCAT      300
TCTGGCCATA ATGGTCTTCT CTGCTGTTC TTGAACATTC CAGGAACATT CCCCCCATA      360
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:364:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:364:

```

GAATTCGGCC TTCATGGCCT ACTGGGTTCT GAGAAGCAGT GGCCCGAGCT GAAGCATCCA      60
GACAATGAGT GTTCAGAAGC TGCCAGATTC TCACCTAGCC TTAGAAGTAA CACAGCCACA      120
TTCTGTCGGT TACAAACACA TTTCTAAGGC CAGTCCAGAT TCAAACGGAG GGCAATTAGA      180

```

TTGACCCCT TGATGAAGGA GGGCAAGGTT AACTGAAAA ACAGCATAGG GACTGGGAGA	240
TATTATGATG TCCATTTTGG GAAAATCTGC CACAGACACA GTGAAGACAG AGAGCCCTTC	300
TCTCTGATCG AGGACCTCCA GAATGATCTG CTGAGTCACT CAGGTATGCT GGACCATTCA	360
CACTCACCCC GGAAAAGCTC GAG	383

(2) INFORMATION FOR SEQ ID NO:365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:365:

GAGGTTTACA GGTTTAAGCA TTTGTTTTTA CAAAAAGGAA TGGGATATGG GGGTGGTCAA	60
GTTTTACGGG TAATAACAAC ATTCTCTCTA GATGGCAGGG GGTAAGTCTG CCTGTCTCTC	120
ATTGCTGGTA CCACATAAGG GATACATTAG TAAAGTAGGG AAAGGGTCAT ATGTGTGGTT	180
GACCTGTTCT TCAGAGAGGA ACGTGGGATG GTATCTGCTG TGTACCTGTC TCAGACCAAA	240
CCTGGGGGTG GACCAGTGCC CCTTTCTTCT CAGCCTTCTT CCACAGCCTG ACTGTACTGC	300
CACCCGCACC CATGAGAAGG AGGTNNTGAA GGAAGCTTGA GGACATCCAC CTCGAG	356

(2) INFORMATION FOR SEQ ID NO:366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:366:

GAATTCGGCC TTCATGGCCT ACAACCATG AAAAAATATA GACTTAGAAA ACGAAAGTTC	60
CCCTTAATCA CAAAGAACCA CAGTTGACAG GGTGATAGA TGTTTTTTCA GATTTTTTTT	120
TTCATATGTC TGCTATCTTT CCCACAGGA ACTGGGTTTT ATTTTAGGTG TTGTTTTGCA	180
ACCTCTGTTT TTCAGTTGCC AGTTTATCTC AGACATTGTC CTATGTCAGT ACAGGCCCAT	240
CTCGAG	246

(2) INFORMATION FOR SEQ ID NO:367:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:367:

GAATTCGGCC TTCATGGCCT ACAAAAAAC AACTTTCCAG TGGCTTCTCA CTGCTCTGAG	60
AATAAACTCC AGGCTCTTCC ATTGCAACCA ACAGGATCTG GTGATTGAC CCCAGCCCCT	120
CTTTCCAGGC CTCATCACC TTGATCCTCC CTTAACCTAT CCTGCTCCAG CTGCACTGGC	180
TGCCTTCTTA TTCTCTCAGC ATACCAAGAT TGTCTTGCC ACAGGGCCGC CACTCGAG	238

(2) INFORMATION FOR SEQ ID NO:368:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:368:

```

GAATTCGGCC TTCATGGCCT AGTTTTTCT ACTCCTACAA GTGTAAATTG AAAAATCTTT      60
ATATTAAAAA AGTAACTGT TATGAAGCTG CTATGTACTA ATAATACTTT GCTTGCCAAA      120
GTGTTGGGT TTTGTGTG TTTGTTGTT TGTGTTT TGGTTCATGA ACAACAGTGT      180
CTAGAAACCC ATTTTGAAAG TGGAAATTA TTAAGTCACC TATCACTCGA G              231

```

(2) INFORMATION FOR SEQ ID NO:369:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:369:

```

GAATTCGGCC TTCATGGCCT ACTTGGTCTT CTGCACCTTT GTCTCTGACG TACTTCCTTT      60
CTTCACAAGT GCCATTTACA GAAAGCTGGG CTAAACCAT TCCCAGCTAT TCCTCCTACA      120
GCTTTCCTGA ATTATTCAG AATACAAAAT TCTGTATCTC CAAGAACTA TTACAGATTT      180
AGATTAAAAA ATATGCACTA TTTTCTACCT TGTATGTTTT GCTTACTATT TTTTTTTGCG      240
AGAGGATATG TCTTAAAAAT TGAAATGCAT CAAAAAT              277

```

(2) INFORMATION FOR SEQ ID NO:370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:370:

```

GAATTCGGCC TTCATGGCCT ACCAAGTCAA AAAATAGAAC AGTTCGGGCA CCCCAGAAGC      60
CCTTTGCCAC GTGGTCACAA CCTCCCTGT TCCACCAAC AGTAACATTC TAGTTTTTAC      120
AGTAATTTCT TCCTTGCTTT TCTTTGTAAT TTTACTGCCC TGTGTTTCTT AATATGATTT      180
AGTTTTCCTT GGTTCCTT TCATATAAAT GAAATCATAC TGAATATATT ATTTTCATATT      240
TTGCCCAATA TTTTGTGTTT AAGATTCATC CATCTGTAG CTCCAATGTA TTTATTTTCA      300
TTTTGTATA ATTATATGAT TATGCCACAG TTTGTCAGTT CACTCGAG              348

```

(2) INFORMATION FOR SEQ ID NO:371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:371:

GAATTCGGCC	TTCATGGCCT	AGAATTATTA	GGAAACAAAT	GGTTTGTCTG	TCTTTTGGTC	60
ATTAGCTTGG	CCCCATGTTT	AAGCATTCCG	TAACAACTGT	GAAGAGCCTG	CTACAAATAA	120
AGTGGTAGGT	GCTCTGAAGA	AAAATAAAGC	TGTTAAAGGG	AATAGAAAGT	GATGAAGGCA	180
GGGGCTGTTA	GACAGGCTGG	TCAGTGTCTG	AGGAAGTAGC	CCTGCACTGA	GACCTGAAAA	240
GTAAAGAAGC	AAGCCATGGG	GAGTTGGGGA	GGAGCATTCC	AGACAGAGGC	TTGATGTGTT	300
GAACCATCTT	TTCCAAGCTC	TTCTCTGTT	ACCTTCTCTT	TAGTCACTAT	GTCCCCTTTC	360
TATCCCAGAC	CATAATTCCA	CCATTATCT	TAAGGCTGAG			400

(2) INFORMATION FOR SEQ ID NO:372:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 268 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:372:

GAACGATTGA	ATTCTAGACC	TGCCTCGAGA	TCAGCACTAA	CCCCCCAAC	TCCCAGCCTT	60
TAGTTTGCTG	TAGGCTGTCA	AACCAGATAA	CCAACTTGT	TAAATTGAGA	ATCAATAGGC	120
TGTACATAGG	GACTACAACA	GAATGACGCT	CATTATTGAC	AGAATCAAGT	TCAAACCTCT	180
TGTCCTGGCG	TCTGTTGGCC	TCTGGCAGCT	GGCTCATCTG	GCATTAGCTG	GTTGCACGAG	240
TTGCTGCAAC	CCTCCCACCC	CGCTCGAG				268

(2) INFORMATION FOR SEQ ID NO:373:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 463 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:373:

GTGAGGTTTT	AACTGAGCTC	GAAGAATTGG	AATCAAAAGA	GATAGGTTTG	TCTCAGTCCA	60
GACAGTGGAT	AGCATAAGGA	AAGTACAACT	GCAGAAAAGA	GGGGGACAGC	GAAGAGACTG	120
GATTGATGCG	TTATCTAGGC	GGTACCTGTC	TCCATTCTTT	TCTAGCCAGC	CTTTGAGCAT	180
TTCATCAAGA	ATAGAGGAAT	TCAAAGTACT	GCAGTCTGCT	TGAACCACTG	CTTGTGAGTG	240
GCTCTAAAAA	AAATACTTGA	ATTTGAACTT	GAAAGAACAC	TCAAATAAGG	TTTGGGGCTT	300
CTCTTTGTTT	AATACTTTAA	GCGTCTTATT	TCTAACATAA	ATATACTGAT	TGCACAGAAT	360
TTGATTGTTC	ATAGCAGCAG	TTGCCTGTAC	TTTAGAATTC	TCAGATATTA	GAGCTGAAAG	420
ATCATCTGAG	TTACTTTATA	AATGGGGAAA	TCTCGATCTC	GAG		463

(2) INFORMATION FOR SEQ ID NO:374:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 451 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:374:

```
GAACGGCAGC CATTGAAGCA TATTGGAAAA GGAAGTGGGG AATTTATTAA AGCACTCATG      60
AAGGAAATTC CAGCGCTGCT TCATCTTCCA GTGCTGATAA TTATGGCATT AGCCATCCTG      120
AGTTTCTGCT ATGGTGCTGG AAAATCAGTT CATGTGCTGA GACATATAGG CGGTCCTTGA      180
GAGAGAACCT CCCCAGGCAC TTCGGCCACG GGATAGAAGA CGGCAGGAGG AAATTGATTA      240
TAGACCTGAT GGTGGAGCAG GTGATGCCGA TTCCATTAT AGGGGCCAAA TGGGCCCCAC      300
TGAGCAAGGC CCTTATGCCA AAACGTATGA GGGTAGAAGA GAGATTTTGA GAGAGAGAGA      360
TGTTGACTTG AGATTTCAGA CTGGCAACAA GAGCCCTGAA GTGCTCCGGG CATTGATGT      420
ACCAGACGCA GAGGCACGAG AGCCCCTCGA G      451
```

(2) INFORMATION FOR SEQ ID NO:375:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 513 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:375:

```
GAATTCGGCT TCATGGCCTA CTCAGATCTT AAAATTCAGG CTGTCAAAGA GATTGCTAT      60
GAGGTTGCTC TCAATGACTT CAGGCACAGT CGGCAGGAGA TTGAAGCCCT GGCCATTGTC      120
AANATGAAGG AGCTTTGTGC CATGNTGTC AAGAAAGACC CCAATGAGCG GGACTCCTGG      180
AGGGCAGTGG CCAGGGACGT CTGGGATACC GTCGGTGTG GGGATGAGAA GATCGAAGAC      240
GTCATGGCCA CTGGGAAAGG CAGCACTGAT GTAGATGACC TCAAGGTTCA TATAGACAAG      300
CTGGAAGATA TTTTGCAAGA AGTCAAAAAG CAAAATAACA TGAAAGACGA GGAGATAAAA      360
GTCTTAAGAA ATAAATGCT CAAAATGGAA AAAGTCTTGC CACTGATCGG ATCTCAGGAA      420
CAGAAAAGCC CAGGAAGCCA CAAAGCAAAG GAGCCTGTTG GTGCTGGTGT TAGTAGCACC      480
TCTGAGAATA ATGTAAGTAA AGGAGACCTC GAG      513
```

(2) INFORMATION FOR SEQ ID NO:376:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:376:

```
CAGAATGGGA TCGAAGCCTG CCTCCTTAGG NTCTTGCCN TCATCCTCTC TGGCAAATGC      60
AGTTACAGCC CGGAGCCCGA CCAGCGGAGG ACGTGCCCC CAGGCTGGGT GTCCTGGGC      120
CGTGCGGACC CTGAGGAAGA GCTGAGTCTC ACCTTTGCCC TGAGACAGCA GAATGTGGAA      180
AGACTCTCGG AGCTGGTGCA GGCTGTGTCG GATCCCAGCT CTCCTCAATA CGGAAAATAC      240
CTGACCCTAG AGAATGTGGC TGATCTGGTG AGGCCATCCC CACTGACCCT CCACACGCTC      300
GAG      303
```

(2) INFORMATION FOR SEQ ID NO:377:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:377:

```
GAATTCGGCC TTCATGGCCT ACTTCATTGT AAGGTACTTC TTTGCGGCGC TGACAGTGCT      60
CACGCTCCTG GGCCTCCTCC ATGGACTCGT GCTGCTGCCT GTGCTGCTGT CCATCCTGGG      120
CCCCCGCCA GAGGTGATAC AGATGTACAA GGAAAGCCCA GAGATCCTGA GTCCACCAGC      180
TCCACAGGGA GCGGGGCTTA GGTGGGGGGC ATCCTCCTCC CTGCCCCAGA GCITTTGCCAG      240
AGTGACTACC TCCATGACCG TGGCCATCCA CCCACCCCCC CTGCCTGGTG CCTACATCCA      300
TCCAGCCCCT GATGAGCCCC CCAGGTCCCT CGAG                                     334
```

(2) INFORMATION FOR SEQ ID NO:378:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:378:

```
GGATTTTAAG GATCACATTC CAAGGGAAC TGATATGAAG GTTGCAATGA ATGTGTATGA      60
GTTATCATCA GCTGCCGAT TACCTTGTA GATTGATCCT GCATTGGTCG TAGCTCTTTT      120
TTCACAAAAA TCGGAAAACA TTAGTCCAGA AGAAGAGTAT AAAATTGCCT GCCTTCTCAT      180
GGTGTGTGTG GCAGTTTCTT TGCCAACACT GGCCAGTAAT GTGATGTCTC AGTACAGCCC      240
TGCTATAGAA GGGCATTGCA ACAACATACA TTGCTTGGCC AAAGCCATCA ACCAGATTGC      300
TCGAG                                     305
```

(2) INFORMATION FOR SEQ ID NO:379:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 329 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:379:

```
GAATTCGGCC TTCATGGCCT ACCCAAACAT TATCCCTCTA CACTGTCCCC ACTATGCTAT      60
ACCCCTGCAC TATACCCCTA TGCTGTCTCC CTTACGCTAT CCCCCTATGC TATGTCCCCT      120
ACACTATCCC CCTTGTGTGT CCCTCCATGC TACTCCCTAC GCTATCCAC TACTCTATCC      180
CCCTGACGCT GTCCCCCTAC GCTATCCCGC TACACTGTTC CCCCTACACT ATCTCCATAC      240
ACTGTCCCC TACACTCTCC CCCTACTCAA TTCCCCCTAC ACTCTCCGCG TACACTATCC      300
CCGCTACACT ATCCCCGAC GCTCTCGAG                                     329
```

(2) INFORMATION FOR SEQ ID NO:380:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 273 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:380:

```

GTTGGAATGC TCTTTACTTC CTTTGTGGAG CCTCCCTGCA CAAGCAGCAC TTTCTTTTGC      60
CATAGCAACA TGTGCATCAA TAATTCTTTA GTCTGTAATG GTGTCCAAAA TTGTGCATAC      120
CCTTGGGATG AAAATCATTG TAAAGAAAAG AAAAAAGCAG GAGTATTTGA ACAAATCACT      180
AAGACTCATG GAACAATTAT TGGCATTACT TCAGGGATTG TCTTGGTCCT TCTCATTATT      240
TCTATTTTAG TACAAGTGAA ACAGCATCTC GAG                                     273

```

(2) INFORMATION FOR SEQ ID NO:381:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 338 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:381:

```

GAATTCGGCC TTCATGGCCT ACATAACTCT CCACAGGCTC CCCTGGGAGG GGTGCCCCCA      60
CCTCACCCGC CACCTCACTT CTCAGCCCCT CTCCCATCC AAGGGCTCCC TGGGCTGCCC      120
CCACCCTAGT CATGATCTCG CTCCTCTACT CTCTCGTAGT ACTTTATTTT TACCTTGCTC      180
CTGGCTCACA TTACATGCTT ATCTTGTAAT TATAGATGGT TCTACATATG TCTCCTTTTG      240
CATCCTTTTC TCAAAGCTCC TGTGAGGCCA GGGATGGTTT TATGCCTTTT CTCATCCCCC      300
TATGTTCTAG TATAATGCTT TACACATGTT TACTCGAG                                     338

```

(2) INFORMATION FOR SEQ ID NO:382:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 334 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:382:

```

GAATTCGGCC TTCATGGCCT ACTTTCTCTC CTTTTTTCCT GTAAGTGTGC TGTTTTTGTT      60
TTGGTCTTCC TCTCATACCC GTTCTGTCAT TTCATCTTTT CTTTCTATTG GGACTTCATT      120
TCATTTTTTT TTAACCTTAT CTTTGTGTTT TCTTGTATAT CCCATCCTTT TTGATAAAAT      180
CCATCGCATG TGTCTTCTTT TTTTCTTTAT TTTCTTTCCT TTCCTTTTTC CTTTTTCTTT      240
CTCCCAAAC TTTTCTTTT CACAGCATTG GAACACGGGA GGTAGTCACC CAGAAGAACT      300
TGAGCGGCCT GGTGCCCATC CGAGACCACT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:383:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 232 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:383:

GCAGAAAATA TGGTATCGGT TTCATTTAAT AAAAATGAAA AAATAATTTT CAGTTATCAG	60
TAATTTCTCA GTTACACAAC CTCTGCCTTC ATTTCCGCTT AGCCATGAAC TTTTACTGC	120
ACAAAGGAAT TTAAATAGC CAAATTCTAC AATTCTGGCT GGGTGTGGG GCTCATGCCT	180
GGGATCTCAG TAGTATGGGA CCCGAGGCA GGTCTAGAAT TCAATCCTCG AG	232

(2) INFORMATION FOR SEQ ID NO:384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:384:

GCCTCTGCTT TTAATTCATT GGCAACTGTT ACGATGGAAG ACCTGATTG ACCTTGGTTC	60
CCTGAGTTCT CTGAAGCCCG GGCCATCATG CTTTCCAGAG GCCTTGCCTT TGGCTATGGG	120
CTGCTTTGTC TAGGAATGGC CTATATTTCC TCCCAGATGG GACCTGTGCT GCAGGCAGCA	180
ATCAGCATCT TTGGCATGGT TGGGGGACCG CTGCTGGGAC TCTTCTGCCT TGGAAATGTT	240
TTTCCATGTG CTAACCCCTCC TGGTGCTGTT GTGGGCCCTGT TGGCTGGGCT CGTCATGGCC	300
TTCTGGATTG GCATCGGGAG CATCGTGACC AGCATGGGCT TCAGCATGCC ACCCTCTCCC	360
TCTAATGGGT CCAGCTTCTC CTGCCCACC AATCTAACCG TTGCCACTGT GACCACACTT	420
CTCGAG	426

(2) INFORMATION FOR SEQ ID NO:385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:385:

GAATTCGGCC TTCATGGCCT AGGCCCTTAA ACTGGATTCA AAAAATGCTC TAAACATAGG	60
AATGGTTGAA GAGGTCTTGC AGTCTTCAGA TGAAACTAAA TCTCTAGAAG AGGCACAAGA	120
ATGGCTAAAG CAATTCATCC AAGGGCCACC GGAAGTAATT AGAGCTTTGA AAAAATCTGT	180
TTGTTCAGGC AGAGAGCTAT ATTTGGAGGA AGCATTACAG AACGAAAGAG ATCTTTTAGG	240
AACAGTTTGG GGTGGGCCTG CAAATTTAGA GGCTACCTCG AG	282

(2) INFORMATION FOR SEQ ID NO:386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 250 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:386:

```

GATTGAATTC TAGACCTGCC TCGAAGGCCG AGAGGGAAAG TTGAAAGGTC CCAAATTCAA      60
GATGCCTGAG ATGAACATCA AAGCCCCCAA GATCTCCATG CCTGACATTG ATCTTAACCT      120
GAAAGGACCC AAAGTGAAGG GTGATATGGA TGTGTCTCTG CCAAAGTGG AAGGTGACAT      180
GCAAGTTCTT GACTTGGATA TTAAAGGCCC CAAAGTGGAT ATTAATGCCC CAGATGTGGA      240
TGGACTCGAG                                     250

```

(2) INFORMATION FOR SEQ ID NO:387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:387:

```

GAATTCTAGA CCCACCTCCA CCTTTAACTC GAAGTAACAC TGCAATCGT TTAATGAAAA      60
CACTCTCAAA ACTGAATTTA TGTGTTGATA AAACAGAGAA AGGAGAAAGT AGTAGTCCTT      120
CTCCATCAGC TGAAAAAGGA AAGATTCTAA ATGTTTCAGT GATTGAAGAA AGTGGCAATA      180
AAAACGATCA AAAGTCTCAA AAAATTATGA AGAAGAAAGA GTCATCTTCT ATGTTGGCTA      240
CAGTTAAAGA AGAAGTCTCT GGTAGTTCAG CAGCTGTTAC GGAGAATGCT GATAGTGATA      300
GAATTTCTGA TGAAGCAAAT AGTAATTTTA ACCAAGGGCT CGAG                          344

```

(2) INFORMATION FOR SEQ ID NO:388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 165 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:388:

```

GGAGTAATCA GAGGTGTTCT TGTGTTGTA TAAGGGTGGC AGGAGTGGAC ATTCTTCACA      60
TACACCCATT ATTGTTTGA AGTGTTTAAT TACCTTTTGA GCTACATTTT TGCAGCTGAG      120
TTTAGAATGA AAACCACAAG AGTTTTATTG TTGGCTGTAC TCGAG                          165

```

(2) INFORMATION FOR SEQ ID NO:389:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 252 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:389:

```

GAATTCGGCC TTCATGGCCT AGAACAGAGC TTAATTATTC TTTCTGAAAC CAAGGCTTCT      60
CTAGTGAGCA CCATGAGCCT TTGGAACAA CAGATGTATA CAATAGCAA GTTTCATTTC      120
TTTACCTTGA AACGTGAAAG TAAATCAGTG AGATCAGTGT TGCTTCTGCT TTAATTTT      180
TTCACAGTTC AGATTTTAT GTTTTGGTT CATCACTCTT TTAATAATGC TGTGGTTCCC      240
ATCAAATCG AG                                     252

```

(2) INFORMATION FOR SEQ ID NO:390:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 479 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:390:

```
GAATTCGGCC TTCATGGCCT AGGATGTTCA CTTGCATGCC TCTGGATTTT AAAATTATTG      60
TTCACATGAC TCCTTTTCTG TCGTGTGGGA AGCAGCTACA GAGCAGTAGA ATCCACTGAA      120
TTGGTACACT GAAGCAGGCA TGCCATTAA ATGAAGGCAG TTAACCTTGA CTGTTGTATC      180
ACCAGAGTTA AAGAATTCTG GTGCCCCTCT TTAAGTCTTC AGGAAGTGTT TAGAGGCTTA      240
TTCACATTAG TTAAACACAGG CCCCCCCCAC CTTCCCCAAG GCAACAGAAA ACATAACCAT      300
TAGCTCTCTT CCTGTTTTC TTCTCATTT CATGCTTGCT TCGGCTGCTA AACTGAATTT      360
TTGTTACTTA GAATATTATA AAGTGTGGAT GCTTCTATA ATGCTATTGG TCTAAGTGTG      420
ATTAAATTTC ATTAAGGTGT ATAAGCCTCT AATTATTACA TAACTGGCAC TGGCTCGAG      479
```

(2) INFORMATION FOR SEQ ID NO:391:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:391:

```
GAATTCGGCC TTCATGGCCT AGCCTATTAC ACAGTAAGTT AATAATTGTG TCCTTGCAAA      60
TAAGCATTGT GTTCTGAAAT GGAATCAGCA TATTTCCCTA TAAAGACACT TCCACTCATT      120
CATTAAATGA GCAGCCCCAG TTGATAAAGA ATCAGTATAT CATGTTCTGA TATTTAATCA      180
GCAAATCAT TTATTCAGTA GAAATTTGAA TTCCTGTGAT GTGCCAGGCT TGTGAGGAGG      240
GAGACTCGAG                                     250
```

(2) INFORMATION FOR SEQ ID NO:392:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 337 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:392:

```
GAATTCGGCC TTCATGGCCT AGTCGACTCC TGTGAGGTAT GGTGCTGGGT GCAGATGCAG      60
TGTGGCTCTG GATAGCACCT TATGGACAGT TGTGTCCCCA AGGAAGGATG AGAATAGCTA      120
CTGAAGTCCT AAAGAGCAAG CCTAACTCAA GCCATTGGCA CACAGGCATT AGACAGAAAG      180
CTGGAAGTTG AAATGGTGGA GTCCAACTTG CCTGGACCAG CTTAATGGTT CTGCTCCTGG      240
TAACGTTTTT ATCCATGGAT GACTTGCTTG GGTATGGAGA GTCGGCTTGA CTACACTGTG      300
TGGAGCAAGT TTAAAGAAG CAAAGGAAC CCTCGAG                                     337
```

(2) INFORMATION FOR SEQ ID NO:393:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 216 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:393:

```
GCGATTGAAC TCCTGACCTC AAGTGATCTG CCCACTTGTG CCTCCAGAA CTGGGATAAA      60
AAAAAAAAAA ATAGATCCTT GSTATTATTC CATTACATAC GGATTGTAAA ATTCAGTTAA      120
ACATTCACTC CTGGTGGGC ATTTATGTAT TTCCTTTGTT TGTGTTGTTG CAGCATTGCT      180
CTGTTAAACC TTTTATAAG TACATCTCGA CTCGAG                                216
```

(2) INFORMATION FOR SEQ ID NO:394:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 248 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:394:

```
GAATTCGGCC TTCATGGCCT ACCACATTTG TAACGGAGCC ATTGAAGCAT ATTGGAAAAG      60
GAACTGGGGA ATTTATTAAA GCACTCATGA AGGAAATCC AGCGCTGCTT CATCTCCAG      120
TGCTGATAAT TATGGCATTG GCCATCCTGA GTTCTGCTA TGGTGCTGGA AAATCAGTTC      180
ATGTGCTGAG ACATATAGGC GGTCTGAGA GCGAACCTCC CCAGGCACCTT CGGCTGGGA      240
TACTCGAG                                248
```

(2) INFORMATION FOR SEQ ID NO:395:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 238 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:395:

```
GAATTCGGCC TTCATGGCCT AGCCTTCCTC TACCATTTTT AATTTTITTA GACTTCATT      60
TGTGATTAT TGCTGCTCTG GGGGCTTCAC ATCCAATCCT TTTATGGTTT CATCTTCCT      120
TTCCTTACAT TTGTTGCATA TAACAATGGC GTGTTTAGCT ACTGCAGTGA AAAATCAATC      180
AAGCCTATTC CATATTCACA GGCTTGCAAT GGCACCAACG GCTCCTGGAT CTCTCGAG      238
```

(2) INFORMATION FOR SEQ ID NO:396:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 188 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:396:

GAATTCGGCC TTCATGGCCT AAGTTGATCC GGATACACAC CTGCTAAAC TGCTTAAAC	60
ATTAGAAGGA CATGCTTATG GCGTTTCTTA TATTGCATGG AGTCCAGATG ACAACTATCT	120
TGTTGCTTGT GGCCAGATG ACTGCTCTGA GCTTTGGCTT TGAATGTAC AACAGGAGT	180
CTCTCGAG	188

(2) INFORMATION FOR SEQ ID NO:397:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:397:

GAATTCGGCC TTCATGGCCT ACAGGCATGT TGAGATTGG AAAAGTGGAT GTAAGTAAA	60
TTCAGATAGC TTTAGTGATT GTCTTGTGT TGTCTGCATT TGGAGGAGCA ACAATGTGGG	120
ACTATACGAT TCCTATTCTA GAAATAAAAT TGAAGATCCT TCCAGTTCTT GGATTCTAG	180
GTGGAGTAAT ATTTTCCTGT TCAAATTATT TCCATGTTAT CCTCCATGGT GGTGTTGGCA	240
AGAATGGATC CACTATAGCA GGCACCAGTG TCTTGTCAAC TGGACTCCAC ATAGGACTAA	300
TTATTATACT GGCAATAATG ATCTATAAAA AGTCAGCAAC TGATGTGTTT GAAAAGCATC	360
CTTGTCTTTA TATCCTAATG TTTGGATGTG TCTTTGCTAA AGTCTCACA AAATTAGTGG	420
TAGCTCACAT GACCAAAAGT GAACTATATC TTCAAGACAC TGTCTTTTG GGGCCAGGGC	480
TCGAG	485

(2) INFORMATION FOR SEQ ID NO:398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:398:

GAATTCGGCC TTCATGCCTA GTGGATCCGG AACTCTGTG GCTCTAGACT TTCAACTATT	60
TTATTTTTC TTTTGTATTT TTTGTTTGT GCTTGCTTTT TTCAATGGG AACTAGAATG	120
TAAGATGCCA AACTCAGCCT GTGGGAACA TGGATTTC AACAAGCAAC CACAGAGCGT	180
GGTTTCATT TCTATTCCT GTTCATGTGG GAGGCAGAGA AGGAAATCAG GTGCTCAGTT	240
CCAGGGACAT CACAGGACAG GACTCGAG	268

(2) INFORMATION FOR SEQ ID NO:399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:399:

```

GAATTCGGCC TTCATGGCCT ACACCTCTTC TGCCAACCAG CTGCTTGGGA TGA CTGCGAT      60
CCCGTGTGCT TGTCTGGGTA TCTTCTGGG AGGTCTTTTG GTGAAGAAGC TCAGCCTGTC      120
TGCCCTGGGG GCCATTGCGA TGGCCATGCT CGTCAACCTG GTGTCCACTG CTTGCTACGT      180
CTCCTTCCTC TTCCTGGGCT GCGACACTGG CCCTGTGGCT GGGGTTACTG TTCCCTATGG      240
AAACAGCACA GCACCTGGCT CAGCCCTGGA CCCCTACTCG CCCAAG                      286

```

(2) INFORMATION FOR SEQ ID NO:400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:400:

```

GAATTCGGCC TTCATGGCCT ACCTGCCTCG AGATGATCAT TCTTTCTTG CTTCTAGGCT      60
CTGTGTCCTC CTGGTTTCCT CCAACCTCTC TGGTCCTGTT TCATTGCTG TGGGTTCTT      120
TTGCCTTTGC CACCCCTCAA ATGGGGCTTC TCACTCACAC TAGTGAGTTT TCAGTGCTTG      180
CAGACCCAAC ACCCTCTTTT TATAACAAAT ATTTTAAAT ACGTCCTTTT CCACAACCTG      240
AG                                                                242

```

(2) INFORMATION FOR SEQ ID NO:401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:401:

```

GAATTCGGCC TTCATGGCCT AGTCCCATCA GAGGGAGCTG ATGAAGAATG GTCCTGTAA      60
GTAAGTCACT AGGTTCACA ACTGCCTGGC CGAGCACTCA GCCCGTGGAG CTCAGGCCAA      120
CACCAGAGCC CCGGTTTITAG GGGCCAGGAG AGCAGGTGAC CAATTATTTG GGGAGTCTTG      180
GGTAGAATTT CCGCCACACA TTCTCCCGAG GGCTGCAGGG GTCTTCCGAG GCAGGGCGGT      240
GGAGCAGGAT TCAGGATGTG GTGGGAATAG AGTGAGGGGC AGTGGGTGGT GCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:402:

```

GAATTCGGCC TTCATGGCCT AAAAACTAG AATAATGGAA GAGTAAATAA ACACAATTCT      60
TAATGTATTA CAAGAAATAA AAGGTTTAAA AGTAGATTTT TTAATTGAAA AGAATTAAT      120
CAGATAAAAA TATTTGAGAG GTAATGCAAA CATTTAAGTT TGTCAAAGAA GCTTCAACAT      180
CTGGATAATA GGAAAGAAAA AAACCAAGC AAAAGAAAAA TAAGCCACAA ACTAAAAAAT      240
GTTTAGTTCT TGAAATTTAA AAAAGTAAAT ATTGAAAGAG CATGCTGTGT ACCTGAGATT      300

```

ATTTACCCAA AACTCGAG

318

(2) INFORMATION FOR SEQ ID NO:403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:403:

GAATTCGGCC TTCATGGCCT AGATTGAATT CTAGACCTGC CTCGAGTCTG GGCACCCTGA	60
GCAGCAGCCT GAGCCGGGCC AAGTCTGAGC CCTTCCGCAT TTCTCCGGTC AACCGCATGT	120
ATGCCATCTG CCGCAGCTAC CCAGGGCTGC TGATCGTGCC CCAGAGTGTC CAGGACAACG	180
CCCTGCAGCG CGTGTCCTCG TGCTATCGCC AGAACCGCTT CCCCCTGGTC TGCTGGCGCA	240
GCGGGCGGTC CAAGGCGGTG CTGCTGCGCT CTGGAGGCCT GCATGGCAAA GGTGTCGTCC	300
GCCTCTTCAA GGCCCAAGAC GCACCTTCTC CAGGCCAGTC CCAGGCGGAC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:404:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:404:

GAAATTCGGCC TTCATGGCCT AGTCATGGAA CAAGTCCTTG CTAACCTAGA AAACAGGACT	60
AGTATTACTG AAACAGATGA ACAAATGCAA GCATATGATC ACCTTTCATA TGAAACACCT	120
TATGAAACCC CACAAGATGA GGGTTATGAT GGTCCAGCCT GGGTGACAGA GCGAGACTCT	180
GTCTTATAAA GAAAAAATAA AAAAGAAGTG GCAGCTCTGT CTGCTTCTCA CAGAGTTGCT	240
AGGGACAACCT GCTGAGGCAG GCACCTGCCC TTGGGCTCCC CGGGTGGGCT GCTATTTGCC	300
TGTGGGCTCT GCCTGCCCCG CTGTCCAGTC CCCGGGGTGG CTCGAG	346

(2) INFORMATION FOR SEQ ID NO:405:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:405:

GCGATTGAAT TCTAGACCTG CCTCGAGAAC AGGGAACCTT CAAACAAAAG ATATATCATA	60
GGAAGTCAGG TGAGAAGCTG TCAACTGGGC AGGCAGTGAT GAGAATCGTA GTTGTCTTAC	120
TGTACTTTTT TGTGTTGTTT AAAAAACCTA AAGCATCAGC CATTTTGAAA GCAGAGTTTG	180
CAGAGAGCCC CCAACAGAGC CAGAAGTTCG CAAGAGCGAC TGATATTTCT AGAATCCAC	240
GAGGCAG	247

(2) INFORMATION FOR SEQ ID NO:406:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:406:

```

GAATTCGGCC TTCATGGCCT ACAACATCAA AACTCCCAAG CAAATGGATG AATTCATTGA      60
GATCCAAAGT TCAACAGGAA CCTGGTACCA GCGCTGGCTG GTCAGATTCA AGACCATTTT      120
CAAGCAGGTC TGGGATAATG CCCTGTACTG TGTGATGGGG CCCTACAGAA TGAATACACT      180
GATTCTGGCC GTGGTTTGGT TTGCCATGGC ATTCAGTTAC TATGGACTGA CAGTTTGGTT      240
TCCTGATATG ATCCGCTATT TTCAAGATGA AGAATACAAG TCTAAAATGA AGGTGTTTTT      300
TGGTGAGCAT GTGTACGGCG CCACAATCAA CTTACGATG GAAAATCAGA TCCACCAACA      360
TGGGCCCTCGA CCTGACTTTG CCCCCTTGCC CATCAGCCAT TTGCCATCAC CCCAAACAAC      420
TCAGCTTCGG GGAAGTCTCG AG                                         442

```

(2) INFORMATION FOR SEQ ID NO:407:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 154 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:407:

```

CCGAGTGACC TTCTTGATGC TGGCTGTTTC TCTCACCGTT CCCCTGCTTG GAGCCATGAT      60
GCTGCTGGAA TCTCCTATAG ATCCACAGCC TCTCAGCTTC AAAGAACCCC CGCTCTTGCT      120
TGGTGTTCTG CATCCAAATG CGAAGCTCCT CGAG                               154

```

(2) INFORMATION FOR SEQ ID NO:408:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 146 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:408:

```

GAATTCGGCC TTCATGGCCT AGTTTACTTC TGCTTGATCT TTATTCTTCC TTGCTACTAA      60
TTTTGGATTT AGTTTGTTCT TTCTAGACA TTCATTGTTA GATTGTTTAT TTACAATTTT      120
TCTAGTTTTT TTGATGTAGA CATTTA                                         146

```

(2) INFORMATION FOR SEQ ID NO:409:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:409:

GAATTCGGCC	TTCATGGCCT	AGATGTTGCC	AGTTTTCATG	GAGGAAGTAG	ACATGAAAGC	60
TTGTTTGTA	TGTGTTGAC	AGAGTAGAAA	GACATTGAAG	AAGGTGATGG	TATACATCAC	120
TTGAATATTT	TTATTGAAAA	GGGAGGGAGG	AAATGGAGCG	TTAGTTGTAG	GACCAGATGA	180
TGTAAGAGA	GTTTTTTAAA	GTGTACAAAA	CAATGGCATG	TTGTGATACT	AATGAGAAGG	240
AGCCAATAGA	GAACAAAAAA	TTGATGATGC	AGGAGACGAC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:410:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:410:

CTCGAGGGAT	CTGGCTTTCT	CTGTCTTCTC	ATTTACTACA	TNACGCTGGT	GAATTAATAG	60
ATNTCTCAAC	AAAAGGACAT	TTAAATCAAC	ATATGACACC	TGTTTAAATT	CTTAAGAAGC	120
CATTAAATTAC	ACATTCTTAA	GAAATGAGC	TATGACACAA	CTCTTCTCAC	TGTATACTC	180
CTATCTGTGA	TTCTCAATCA	GGTGACTTTT	CAGCTNCAAG	ACGGATCTTT	TCTATTTCATC	240
TCCTCTGGTT	CGGACCAATT	AAATGTNTTC	TTTTGCAATC	ANACATCTC	ANNTGCCAAA	300
TCTTCAAAG	CAAAGGAGTT	NGTTAGCAAC	ATATTAGGCC	ATGAAGGCCG	AATTC	355

(2) INFORMATION FOR SEQ ID NO:411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:411:

GAATTCTAGA	CCTGCCTCTG	TATGTTGCTT	TAGCCAGGAT	TCAGAGCTAA	AGTGTAAGTG	60
TGTGCTTCTG	CTTCTGGAT	GTATCTCTCA	AAATTGCTCT	GTCTGTTTAT	TCAGCTCCTG	120
GATCTACCTT	CTCTTTTCTT	TGAATTGGAC	ACCATTTCATG	TCATTGCTCA	CTCAGAACTT	180
CAGCTGTTCT	CATGATCACA	TGCTTCTTTC	CCTGTTTATG	TCCAAT		226

(2) INFORMATION FOR SEQ ID NO:412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 218 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:412:

```

GAATTCGGCC TTCATGGCCT AGTCTGCTGC TTAGCTTGTA TTTTCAGTTT AATATATTCG      60
TGATCATTAA CAAAACAGCG AAGTGAATAA TGGGCATAAA TTTTCCTAAG AAGAATCATT      120
TTCCATACTT ATTTTTCAT ATTATCAAAA AGTATGTAAT TTTGGGGGGT TTTTGGTTT      180
TTTTTTTTTT TGAAACAGAA TCCTGCTCTG TTCTCGAG      240

```

(2) INFORMATION FOR SEQ ID NO:413:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:413:

```

GAATTCGGCC TTCATGGCCT ACTTTGAACA ATTCGGCATG AATTGAAACC AGGTTTTCCT      60
GTGGAAAGTT ATAGCTTGAT TGGGAGATAG AAGTTGAATT GAGTTCTTTC TTGCAACTCT      120
TAGTGTTTAT TTTTATATCT CAGTAAGACG AGGATACCTT CAGTTTGAAT CTGCATAATG      180
TTCACTGCCA AACTCCTTCT CATTTAATGC TTATGGCCTT CACATTTCTG TATAATAAAG      240
ATCAATTATC AGCACTCGAG      260

```

(2) INFORMATION FOR SEQ ID NO:414:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:414:

```

GAATTCGGCC TTCATGGCCT AAGCATATGA ATTTTGGAGA GACAGACATA CAGACCATAA      60
CAGTTCTATT TTCTATAACT ATAGTAGAAT ATCGAAATGA GAACATTGAC ATTGGTAAAA      120
GGTGTATGTA TAGTTTATAT GTTATCTTAT CAAAAGGGTA GATTACAGA ACCAACACAA      180
GTAAGCTATA GAACTAGCCC ATTACCACAA AGATCTCCCA CAAGCTACAG CTTTACAGTC      240
ATACCCACCC GGCTCGAG      258

```

(2) INFORMATION FOR SEQ ID NO:415:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 281 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:415:

```

GAGGACCTTT ATAATCTACT ACTAATTACT GTGAAAGTAA ACATTGTTTA ATATACCAGT      60
TCTTAAAGAA ATATTTTGTC TAGTCATTAA TATTCTAGTT CATCTCAAAG CTTCCATTGG      120
ACAATTTAAA ATTACTTAAA TTTTAAATAT AAAGGAAACA GTTTTCCTGA TTCTCATGAA      180
AGTTCCTATT TGCACTGAAG ATGACTAAAC CTTTGTAGTCA TAGTTTTAGA AGAATTGGCT      240
TTTTTATAGC CATTTTATTT ACATATGGGT ACGGACTCGA G      281

```

(2) INFORMATION FOR SEQ ID NO:416:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 118 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:416:

```
GAATTCGGCC TTCATGGCCT ACTCAGAAAA GAAAATGAAA ATACCTCTAC ATGTGGTCTT    60
CCTGCTAATC TCTCTGACCT TCCTATTCAC CACCCTCCCC ACTGCCCACT TACTCGAG    118
```

(2) INFORMATION FOR SEQ ID NO:417:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 273 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:417:

```
GCGAGGATGG CATGGACGCT TATCGAGCAG CTTCAGGGTG GCAGCTACAA GAAGATTGGC    60
TACTATGACA GCACCAAGGA TGATCTTTCC TGGTCCAAAA CAGATAAATG GATTGGAGGG    120
TCCCCCCCAG CTGACCAGAC CCTGGTCATC AAGACATTCC GCTTCCTGTC ACAGAAACTC    180
TTTATCTCCG TCTCAGTTCT CTCCAGCCTG GGCATTGTCC TAGCTGTTGT CTGTCTGTCC    240
TTTAACATCT ACAACTCACA TGTCGGTCTC GAG                                273
```

(2) INFORMATION FOR SEQ ID NO:418:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 145 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:418:

```
GAATTCGGCC TTCATGGCCT AAGCAGTTGC TAATGCCAGC AGTACATAAA TTGAGGATGG    60
AGCAAAAGGA TCGACACCAC CAATGGCTGC ATTGTGATAG GTGTGGACAG AGCCTGCCAG    120
AATTAAACAC ACGCCAGGAC TCGAG                                145
```

(2) INFORMATION FOR SEQ ID NO:419:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:419:

GGATTCGGCC TTCATGGCCT AGTGTTTATA ATTAATCCTT TAATATTATG GTTATTAACC	60
TCTTAAACAT GAATGAATTC TTGATTGTTT TAACACAGTA CCTAAGACTA ATGCTTTCTG	120
TGGACACCAC TGAGCTCTGC CTCAACTCCA CCCTCTGCGA CCGGAGGACT ATGCCCCTAG	180
TAACTGCTGT CGGTGTGGAC GCTGTGCTGG TTCTGTTTTC TAAAGGAGCA GAAGCACAGG	240
TCTCTGAGAC AGGATCGTTG TCCCTACAGG AGGAACAGTG GCCACTCGAG	290

(2) INFORMATION FOR SEQ ID NO:420:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:420:

GCGATTGAAT TCTAGACCTG CCTCGAGCCT CCCAAAGTGC TGTGATTACA GGAGTGAGCT	60
GCCACGCCCA GCCTACAAGT TTTCTTTTAA CTA CTGCTTT AGTCAACCAT ATCCTCTAGC	120
TTCTGATATT TTCAATTGTT GTTGTCATTT TCTAGATATT CAACAATTTT AAATTAGATT	180
TTCTCTTCGA CTAAAGTGGG AGAATTTTTT CCCGTTTATT TTCTACATGC TAAAGATTTT	240
TATTTTCATT TTGTTATTAA TTTCTAGTGT TACCGTATTG TCATTAGAAA ATATGGGCTG	300
GCTCGAG	307

(2) INFORMATION FOR SEQ ID NO:421:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:421:

GAATTCTGAA AATATTAAGA TTTATCCTAG CACTTACGTT CAACATACCA TAATTTTAT	60
ACTTCTCCAT CTAATAAAAA CCAAGTTTGT TCCTACACTA GTCCAGCCTG CATTCTCAAG	120
AACTCCAGTG ATTATACATC AACATCTAGA GATCAGGTAT CCCAATCCTT TCTTCCATTA	180
TCTAAGCTAA CTCCTTCTTA GCCAAATGGT ACCCTTTGAT TTTGTGTTAA TCCTTTCCTT	240
CCCTCCACTC TTAACCCCTC TCATTCCATC TTCTCCCTCC CTTTCCACC CCACTCTCGA	300
G	301

(2) INFORMATION FOR SEQ ID NO:422:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:422:


```

GAATTCGGCC TTCATGGCCT AGGTTAAAGT TGTCTGGTAA TAAGGTGGAG TGGATTGGG      60
GCAGGTTTTA TGTTGTGTG CTCTCTTAG AAGTCAAAGA GTTGGTGAGG TAACTGCAAT      120
CCTGTCTATA TCAGTGTAGT GATAATGCAC TAGTGTAATG AAGAATGGAG CTGCACGTGT      180
GAGGTTTTTC AAGTCCACAA AGATCAGGTA TTGTCTACGG TCAATAAAGA TTTTTTAAA      240
AAACCCTCTT AACTAAAGAG AGGTAAC TTCCTTCAAAA CTCTGAAATT TACATGTGCT      300
GACTTATAAT ATGTGTGATC CTCGCTGCTT TTCTGATCCC TGGTGGTTGG GGTGTGTGTG      360
TGTGTGTGTC TGTGTGATGG GCTCTCGAG      389

```

(2) INFORMATION FOR SEQ ID NO:423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:423:

```

GAATTCGGCC TTCATGGCCT AATCTTAAAGT GTTTTACATG CTCTACCTGC CGGAATCGCC      60
TGGTCCCGGG AGATCGGTTT CACTACATCA ATGGCAGTTT ATTTTGTGAA CATGATAGAC      120
CTACAGCTCT CATCAATGGC CATTGGAATT CACTTCAGAG CAATCCACTA CTGCCAGACC      180
AGAAGGTCTG CTAAAAGGTC AGAGTAATGC AGAATGCGTG CCTTCATCTC AGATTGTTC      240
ATCACAGGTG GATCCCATGT GTCTTCAGTA GACAAGTCAC CTTTGTAGCT AGCACCAGTG      300
CCAGCTCCAT GCCATTGCAC CTCGAG      326

```

(2) INFORMATION FOR SEQ ID NO:424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 178 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:424:

```

GCGATTGAAT TCTAGACCTG CCTCGAGCCA ATCATTTTAA AATCTAATCT GAACTTTAAC      60
TGGTTAGTTG AGTGCAITTT TATGTGTACT GATGTATTTG CATTATATCC TTACCACCTT      120
ATTTTGTGCT TTTTATGTTT TTTTCTTCCA CTCTTTTTTT TTCTTTTGA ATCTCGAG      178

```

(2) INFORMATION FOR SEQ ID NO:425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 127 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:425:

```

GAATTCGGCC TTCATGTACA TAGATCTTCC TAGTGTCATT GACAAAGGTG ACATTTGCAA      60
GGCTTTTCT TCATCAGATG CAGGGATCTG GACTTCATGT GTATCCTTTT ATCCACTCCT      120
CTTCGAG      127

```

(2) INFORMATION FOR SEQ ID NO:426:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:426:

```
GAATTCGGCC TTCATGGCCT AGAATTTAAT TGCAGAAAAT TATCATATT CTTATAATCC      60
TTTAAATGTC TATAGGATTT ATGATGATAT CTCCCCTTCC ATCCTGATTT TTCAAGTTT      120
TTGTTTTTTC TTTTTCCTTA TAAATCTGG TAAATGTTA TTAATTTTAT TCATTTTAA      180
AAAGAACCAG CTTTGGTTT CATAAAGTTT TATAATTTT TTGTTTCAC TTTCATTAAT      240
TCTACTCTTT ATTATTCCT TCATTTGTT TACTTTGGT TTGTTTGCC ATTTTTC      300
TAGTTCTTA AGGTGCCAGC TCGAG                                         325
```

(2) INFORMATION FOR SEQ ID NO:427:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 223 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:427:

```
GAATTCGGCC TTCATGGCCT AGGCACACAG GCGGGCAGC AACATAACG GCACCCATTA      60
AAAAGCAAGA CTCGCTCTTG AGACTAAAGG AGAAGTTACC TAAATTTCTG TATAAACTCA      120
GTAATTCATT CACTTTACTA GTATTACATT TATGAAATC ACCTTGTGG AAAAAGGAGC      180
GGGAGAGGGA TAAGAAATG CCTGTTCTA GAAAACGCTC GAG                                         223
```

(2) INFORMATION FOR SEQ ID NO:428:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 277 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:428:

```
GAATTCGGCC TTCATGGCCT AAATTCATAC AGAAGACCTT ATTGTGATAA AGTTCAACGG      60
TATAGGTAAA CAACAACAAA AAAACTATCA ACCATAATTT TTTCACCCTA CCAACATTCT      120
CTGAACCTTT CAGTAATATT TTATACACAT GTGCATATTC TGCCTTTTTC ATTTACTATA      180
TCATAAACTT CTTTCTAGAT CATTATTTT CTGCTGCATT TTTTCAGGAT TTATCACCTT      240
TATTTTGTAG TTTAGTTTTT GTGAGTGTAC TCTCGAG                                         277
```

(2) INFORMATION FOR SEQ ID NO:429:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:429:

AAATGAGCCC	TATCACTGAG	AAATACGTGT	TTCATGATTT	AACTCTGTGT	GTGTGTGTGT	60
GTGTATTTT	TTTTGGTTG	TCTTCAGCTG	ACAGTATGAA	AAATGAAACT	GCTGAAAAAG	120
CTGAGCACCT	GGTCACCTT	GGCCTTCCAT	TGCTTTGGCC	TTCAGTAAAA	AGCAGCCTCC	180
CTTCTAGGTC	AGGGAACCAT	GCCATTGAGA	CTAGTAACGG	GCGTTCTGGG	CACAGTCCCA	240
CTGTGCACAG	GTTTGAGAGG	ACAAGTTCAT	CAGAAGGAAG	GCAGTCCTTA	GAAGTCACAT	300
ACGTTGAGCC	CCTCGAG					317

(2) INFORMATION FOR SEQ ID NO:430:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 271 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:430:

GAATTCGGCC	TTCATGGCCT	ACATTCAGAA	AACAGAAAAG	TTTCAAGAAG	CAGGAAGAAA	60
AGACTCACCT	ATGATCCCAA	CACCCAGAGG	TAATAATTTA	CCATTTTGGG	TGTATCTTCT	120
TTGTCTTTTC	CTATGTGTTG	CCTTATGTAG	ATATGTAACA	GGTTGTGGTT	TAAACCGAAG	180
CTATACCCAT	TGTTTGGAGT	CAGGCAGGTG	CGATAAATTT	GTAGGTGGCT	CACCAGAAAT	240
CTATTTGCAT	GATGAACCTA	CAGGACTCGA	G			271

(2) INFORMATION FOR SEQ ID NO:431:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 349 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:431:

GAATCATTTT	TGGTCACCAA	TCTCTCATAT	ACCACTACTG	GATATTTACA	ACATGCTTCA	60
GTGGAGGAGA	AGACACTGCT	GCTTTGCAAA	GATGACCTGG	AATGCCAAAA	GGTCTCTGTT	120
CCGCACTCAT	CTTATTGGAG	TACTTTCTCT	AGTGTTTCTT	TTTGCTATGT	TTTTGTTTTT	180
CAATCATCAT	GACTGGCTGC	CAGGCAGAGC	TGGATTCAAA	GAAAACCCCTG	TGACATACAC	240
TTTCCGAGGA	TTTCGGTCAA	CAAAAAGTGA	GACAAACCAC	AGCTCCCTTC	GGAACATTTG	300
GAAAGAAACA	GTCCCTCAAA	CCCTGAGGCC	TCAAACAGCA	ACTCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:432:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 261 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:432:

GAATTCGGCC TTCATGGCCT ACCTGGATT CTCAATTTAT TAAGTTGTAC TTACCTGATG	60
CTGATGATGA TTAAGTGTAT TACACATTGT CTCAGAGCTC ACTCTTGGCG AGGTTGTGGC	120
CTCGAAAATG CCTTGTGTG CCTCTGGAAT CTGTCTTTTC AGCTTCATCT CCTCCTCCTC	180
ACCTCCTGCT GTGGTGCACA GATACCTATA GGCAGGCTCC ATCTCCTCCT CCCCAGCTCC	240
TCCCCTAGTG CACACCTCGA G	261

(2) INFORMATION FOR SEQ ID NO:433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 212 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:433:

GAATTCTAGA CTGCCTCGA GTCCTACGGG AAACCTCCAG GGTTTTAGGA AGCTGACGAT	60
GCAAGTTTAT CCAATGGGA ATGATAATAA TCATGTTTAT TATCCTGGGG TGCTTCTCC	120
ATAGCAAGTA CTCACTAGG TCCTGTTTAT TAGTCAGTCT TTAATCTCT ACTGAAATAG	180
GTGCTGTCGC ATCCATGGGG AATGAACG AG	212

(2) INFORMATION FOR SEQ ID NO:434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:434:

GGTTCAGTG AGCTGAGATC GCACCACTGC ACTCCAGCCT GGGCAACAGA GTGAGACTTC	60
ATCTCCAAAA AAAAAAAAAA AAAAAAGA CAACCACAAC AAAACGAAA CACCACCACC	120
AAAAAGTTT ACTGGTAGAG TCTCCTTAG ATGTTTTCT TTTCAATACT TGTTTCATAT	180
TCTCCAACG CCCTGCTCC ATAATGTTGG CTGTGCTTTT CTTTGTGCTT ACAGCTCATT	240
GCTGGGATGG ATATGGTGAG TTTTCATGTA CATTGACCAA ATACAATCTC GAG	293

(2) INFORMATION FOR SEQ ID NO:435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:435:

GAATTCGGCC TTCATGGCCT AGGCTTGAAA GGAAATGAGG GAAATTCAG TGAGTTTGAG	60
--	----

```

GAATGGCAGA CTGGGTATGT GACAAATGAG TGGGTAAATA AGGAAATCTC AGATTGAGAA      120
TCCTGGCAGA TCTTTCAATG GGTAGACTG CAGGAATATT GATTTTAAAG CCAGACTGAA      180
GCAAATCTTA GTGATAAAGG AAGGGGAAAG GGTGGCTGAA TCAAATGTTT TACCAATACT      240
CCTTTTTTTA GTATTTGAGT TAAAATTCAG ATTANATGCT TGGCTTAGAA GAATGCAAAG      300
CTTCACTGAG CCTAATAATA TGGATCCCAG TGGGTGAGTG GAGGTGAGTT CACTCGAG      358

```

(2) INFORMATION FOR SEQ ID NO:436:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 258 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:436:

```

GCTCGAGAGA GCTTTTTTTT TTTTTTTTAA ACATTGTATC ATTAATTTAT CACGTGTATC      60
CAAGCTCCTT TGAGTTTCCC TGCCCCCCTC CCTGTGTCAT TCCAGCCATA TCCAGTACT      120
CCTTCCATGC TTCCCCCATT CTGTTTCTG ACTCTATTAC TCCCAGTCCA AATCTTGCTC      180
TTCACTGTCT GCACCTTGTG CTCTCCTCTC TCTCAAAAAA TCTACCCAAA TTCCACCCCT      240
CTTCACAGGC CCCTCGAG      258

```

(2) INFORMATION FOR SEQ ID NO:437:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:437:

```

CAAGCCGGCC ATATTAGAGA GATGGAAATA AAGCTTCCTT AATGTTGTAT ATGTCCTTGA      60
AGTACATCCG TGCATTTTTT TTTAGCATCC AACCATTCTT CCCTTGAGT TCTCGCCCCC      120
TCAAATCACC CTCTCCCGTA GCCCACCCTG CTAACATCTC AGTCTCTGAA AATGCACAGA      180
GATGCCCTGGC TACCTCGCCC TGCCTTCAGC CTCACGGGGC TCAGTCTCTT TTTCTCTTTG      240
GTGCCACCAG GACGGAGCAT GGAGGTCACA GTACCTGCCA CCCTCAACGT CCACTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:438:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 238 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:438:

```

GAATTCCTAC TAAATAATAT TAAGCAGGAA TTTTITAGGT GTTGCTTTTT AGCTCCTTTT      60
TATCAGTTCT GGGGAAGCAA CAGTGCTGCA TCTCCTTTGC TCTCATAGAA TTCTGTAATT      120
TTTATACCAC AGGTCTCTGC TAAAGGCGG CATGTGTTTA GAAATTCTAA AAATGAGGGC      180
TCTGAACTTT GTAAGTGTCC TGATACGTTT TCCCTTTTTT AATCCCAACC CCCTCGAG      238

```

(2) INFORMATION FOR SEQ ID NO:439:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:439:

```

GAATTCGGCC TTCATGGCCT ACAACTTGCA CTCGCTCCA GCATCACTGG CCTCCTGCTG      60
TTATTTAGGT ATACTAGGCA TTTCTGTTT TAGGGCCTTT GTACCTCCAG TTCCCTCTGT      120
TTGGAATGCT TTCCCCCAGA TAGCCCTGTG GTTAAATCTC TTACTTCCTT TGGGTCTGTG      180
CTCAGATGTT ACTTTCTCAG AGGGTCCCCC AAGCCCCCAT GCACTCGAG                229

```

(2) INFORMATION FOR SEQ ID NO:440:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:440:

```

GAATTCGGCC TTCATGGCCT AGAGTCTATT AACTATTTT CTGTTATACC CTGCCAGAAA      60
AGAATTTTAA AAGTTAGTTT ATGTTTTGTG TAACCATGTT CTCAGAATG CAGGTATGTG      120
AGCATCATGG TTTCTGGGTA ATTCTGCTGC TCCTGTCTT GAAAATGGAG ATACCACTTG      180
CAGCTTATCC CACTGCTGAG TATTCCAGCA TTGGTAGTGG TTTCACTCCA TTGCATCCAT      240
CCAGAACTTT CACACAGGCC TCCCCATTAC CCAGCATCCT CGAG                284

```

(2) INFORMATION FOR SEQ ID NO:441:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:441:

```

GAATTCGGCC TTCATGGCCT AATAAAATAA AAATTGGAAG AATGGCATT TATTACAGTA      60
TAGTTAAGAG ATTGGCTAAG GCAGTAAATA AAAGTTAGAA ATGCTCAAAT TTATTGTAAA      120
TTGCTTTTAT AATCATTGAT ATATAAGCA TGCTACTGCT AATCAATTAG TTTTATGTAT      180
TAAGACCTAT CAGCATGTCT TTTTCTAGT ATCTGGTTGA CTTAAACATG ATGTTCTCTG      240
TACCATTTAA CATTTTCAAG ACATATTCTC CCCAACTCG AG                282

```

(2) INFORMATION FOR SEQ ID NO:442:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 241 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:442:

GAATTCGGCC TTCATGGCCT ACTCACCTGC AATCTATTGT TTATATTGTT GCTATGTATC	60
TCTATTCTTT CTGCATCAAA TAATGAATAG CTCATTTTGT GTTGCCTTCA AGTATGACAA	120
ATTCTTTTCC AAATGTGATT CCAGACAGTA TATCCAAACA TGTCTTTCTT TTCCCATTCC	180
TGATCATCCT ACATGTCAAG CACTGCCAAC GTTTACTCAA GAAAGCTTGG TTAGAACCCA	240
G	241

(2) INFORMATION FOR SEQ ID NO:443:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:443:

GCAAGCACAA ATCTAACCAT GAGCTTCAGC AATCAGCTCA ATACAGTGCA CAATCAGGCC	60
AGTGTTCCTAG CTTCCAGTTC TACTGCAGCA GCTGCTACTC TTTCTCTGGC TAATTCAGAT	120
GTCTCACTAC TAAACTACCA GTCAGCTTTG TACCCATCAT CTGCTGCACC AGTTCCTGGA	180
GTTGCCCGAG AGGGTGTTTC CTTGCAGCCT GGAACCAACC AGATTTGCAC TCAGACAGAT	240
CCTCTCGAG	249

(2) INFORMATION FOR SEQ ID NO:444:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:444:

GAATTCGGCC TTCATGGCCT AGGGATTTT TTTCTTTTTT TTCCTCATAT GTGAAGTAAT	60
AGTCTCTTCA CAACAGAAGA AGCCACAAAA CTAACTTAT TGGTCACTGA ATTTTCTTCA	120
AGGTTACGTA CCTCTTGGT ATTTTAAATC TAGATTATGT TGATTTTAT ATTTTGTTC	180
TCATTTTCT ATTTCTTGT TTTCTTTACT GCAATGGGC TCGAG	225

(2) INFORMATION FOR SEQ ID NO:445:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:445:

```

GAATTCGGCC TTCATGGCCT AGTTTGGAG AGCTCTACCT ACTAGCTGGT TATTCTTAC      60
ATTAAATTAA TACCTTTAAA AAGTATTATG AAAATAACAC ACTCAGTAAA AGAAATTTA      120
AAAAACAAAT GCAATAAAAA TGTGTTTCTT TTCAACCTTT GACTTGTCAC TTCCTCCAGC      180
TTTCCCTTA TTAACTGTG AGAGGTATTC TCTATTAGCA GTTACTTATC CCCTCCTCA      240
AACTCGAG                                         248

```

(2) INFORMATION FOR SEQ ID NO:446:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:446:

```

GGATTGAATT CTAGACCTGC CTCGAGCGAC CTCTAGAATC CTACATTGA AATATTCTGG      60
CAGTGAGGTG TTCATCCTAA CTCAGTCAGG TAGCTGTGGA CAGCCTTCAC CTGTTAGGAG      120
CTCCTTAGAA ATAAATCTG AATACCTTTG GTTTCTTTT ATCCTCCAGA GGAATTTCCA      180
CTATCTCCGA AGCTGTTCTT TGTCCACTG ACAATTCGCT TAGTTAATGT TCTTTTTTAG      240
CCTGTACTAT CTCGAG                                         256

```

(2) INFORMATION FOR SEQ ID NO:447:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 250 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:447:

```

GAAGGCAAGA AAATCTATGG AAAGAGAAGG CTACGAGTCC TCGGGCAATG ATGACTACAG      60
GGGTAGTTAC AACACCGTGC TCTCACAGCC TTTATTGAA AAGCAGGACA GAGAAGGTCC      120
AGCCTCCACG GGAAGCAAAC TCACCATTC AAGACATCTG TACCCCGCGC CTTCATCACC      180
TGAGAAAGAA CAGCTGCTGG ACCGCAGACC CACTGAATGT ATGATGTCGC GATCAGTAGA      240
TCACCTCGAG                                         250

```

(2) INFORMATION FOR SEQ ID NO:448:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 198 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:448:

```

GAATTCGGCC TTCATGGCCT AGCTGGGGGG AATAGGTTAT GTGATAAGGA GTCAGTCGGA      60
CAGAGTGGGG TGAAGATGT TCAGACAGGG AAACACACAT GCAANAGAGG GAAGGTGGGA      120
CACAGCATAT GCNTCCAACA TTTGGTAGGG CCGAGGCCCC ACATGGGAGC AGTGAGAGGT      180
TAGGGATCGA CGCTCGAG                                         198

```


(2) INFORMATION FOR SEQ ID NO:449:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 163 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:449:

```
GAATTTTCCT TACCAGGAAA ATTATGCTT TACAATTGT CAGAGGTGCA CATTACTAAT    60
TACAATAGGT CACACTTTT CTATGCGCTT CATTATAATA TTGGCAACTT TATTATGCCC    120
CATTACATAC TGTATTATGC TCTTACTTTA TATGCATTTT GAG                      163
```

(2) INFORMATION FOR SEQ ID NO:450:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 122 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:450:

```
GAATTGCTGA TATCTTATAA AGGGGACCTT TTTTCTTTAC ATTTCTGACG GTTTTTATCA    60
GAATGTATGT ATTAATGCTA TTTGTCTTTG TATATTTATT TTATTTCCAG CCACTTCTCG    120
AG                                     122
```

(2) INFORMATION FOR SEQ ID NO:451:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 302 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:451:

```
GAATTCGGCC TTCATAGCCT AACTCAAGAT CTCCCATCTA TTAAAGCAGA GGAATAACTT    60
TTGTAGGCTT AATACTGCTT TCTCACTTAG GAAAAGTTGA AATTAAGAAC ACACAGGAAG    120
GGATCATTTC CTAAGGTTTA TGTCCTCAAC ATCAAATTGA GTTGAAACTT GACTACAGGC    180
CATCTGCTCA TTCAAAGCAT TACAATAAAT CTGTCCTATT GATGATCAAA ATGAGAGCTG    240
AATTGGATGC AGGATTGGAC ATTGCAAGCT GTTCTCCCAA GTGGGATGGA AAGGTGCTCG    300
AG                                     302
```

(2) INFORMATION FOR SEQ ID NO:452:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 265 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:452:

```
GAATTCGGCC TTCATGGCCT AAAAAATAT TTATTTGACT GAATGATTTA ATATGCAGTT    60
ATGGTGTTTA ATATATCATG TGTTATTTGT TTGTTTAAAT ACAGACATAA CCCACAGTTA    120
TCTTGAACAA GAAACTACGG GGATAAATAA AAGTACGCAG CCAGATGAGC AACTGACTAT    180
GAATTCTGAG AAAAGTATGC ATCGGAAATC CACTGAATTA GTTAATGAAA TAACATGTGA    240
GAACACAGAA TGGCCCGGAC TCGAG                                           265
```

(2) INFORMATION FOR SEQ ID NO:453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 234 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:453:

```
GAATTCGGCC TTCATGGCCT ACTTTAATTT CICTGAGCAG TATTTTACAG TTTTGATGTA    60
TAAACCTGGC ACAGATTATG TTCAGTTTAT TTCTAAGTTT AAGTCATGTT TTGGAATGTT    120
ATATTAAAGG ATATTTTCTT TTTTAAAAA TCTACAATGT TTATTTTATT ATTATTATTT    180
TTAATCTCGC TTCATCACCA AGGCTGGAGT AAAGTGACGC GACCTCAGCT CGAG           234
```

(2) INFORMATION FOR SEQ ID NO:454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:454:

```
GAATTCGGCC TTCATGGCCT ACGCACATCC GCAGTCAGCC ACCTCGCGCG CGCCTCCAGG    60
AGCAAGGATG GAGAGGCTGG TGATCAGGAT GCCCTTCTGT CATCTGTCTA CCTACAGCCT    120
GGTTTGGGTC ATGGCAGCAG TGGTGCTGTG CACAGCACAA GTGCAAGTGG TGACCCAGGA    180
TGAAAGAGAG CAGCTGTACA CACCTGCTTC CTTAAATGTC TCTCTGCAA ATGCCAGGA    240
AGCCCTCATT GTGACATGGC AGAAAAAGAA AGCTGTAAGC CCAGAAAACA TGGTCACCTT    300
CAGCGAGAAC CATGGGGTGG TGATCCAGCC TGCCTATAAG GACAAGATAA ACATTACCCA    360
GCTGGGACTC CAAAACTCAA CCCTCGAG                                           388
```

(2) INFORMATION FOR SEQ ID NO:455:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:455:

```

GAATTCGGCC TTCATGGCCT AGCTGATATT ATTTCTGAGT TTTTGCTTAT TTGCTTTCTA    60
CATAGAATCA ATAAATTGA CAACTAGCAT TGCCTATATA TGCAGGTGTG ATACTATTCA    120
GGGTACTAGT ATATTGGCCA CTCATTATGA AACTTTCAGG TCCTCATATA TTTTCTTTTA    180
TTACAATGAT CTAATTATTT CTGATAAATA TTGGATTCAT AGAGGCTAAA GGGCTGGGAA    240
AGGAAAACAT TCGTGACTAC TTACAACCAT TTGATACGAG TTGTGTCAAT ACAGACCTCA    300
CACAGCAGCA CCTCGAG                                                    317

```

(2) INFORMATION FOR SEQ ID NO:456:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:456:

```

GAATTCGGCC TTCATGGCCC ACAAATGGT AATACAAATA AACCCTACT TACTGCTTTT    60
AATGGTAGTT TGTTTTTTTT TTTTGGAGC AGAGTCTCGC TGTGTCGCCC AGGCTGGAGT    120
GCAGTGGCGC GATCTTGGCT CACTGCAAGC TCCGCCTTC GGGTTCACAC CATTTTCCTG    180
CCTCAGCCTC CCGAGTAGCT GGGACTGCAG GCGCCCGACT CCCGGTTCA CACCATTCTC    240
CTCCCTCAGA CTCGAG                                                    256

```

(2) INFORMATION FOR SEQ ID NO:457:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 434 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:457:

```

GAATTCGGCC TTCATGGCCT AGGAGAATCG TGAGACCTCT ATTCCATAT CTTTTCTAC    60
TACTGGAATT TTTATTTTTA CCATACCCAT AAATTACTTT CTATTTTAAG AAGCAAATAT    120
ATAATTCCTC AGTTTAGTAA AAAGTTCTCA CTGAAAAGC TGGTATATGA ACTTTAGAGG    180
GCAGATTAAT CAACTGCTAA ATATTATTAA TCTTTCTTCT TGGAACTTC CAACACAAAA    240
GACAGTTTAT AGAAAACAAA GTCAGTGTTT AAAACAGCTG AATGAACTAT CTTTGTATAT    300
TTTATTTGTT TTTGTTTTGT TTTGTTTTGT TGAGACAGAG TCTTGCTCTG TTGTCCAGGC    360
TGGAGAGTAA TGGCAGATG ACTGCAACCT CTGCCTCCCG GGCTCAAGTG ATTCTCTCTG    420
CTCAGTCTCT CGAG                                                    434

```

(2) INFORMATION FOR SEQ ID NO:458:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:458:

```

GAATTCGGCT TCATGGACGA GGAGATCGTG TCCGAGAAGC AAGCCGAGGA GAGCCACCGG    60

```

CAGGACAGCG CCAACCTGCT CATCTTCATC CTGCTGCTCA CCCTCACCAT TCTCACAATC	120
TGGCTCTTCA AGCACC GCCG GCGCCGCTTC CTGCACGAAA CCGGCCTGGC TATGATTAT	180
GGTCTTTTGG TGGGCCTTGT GCTTCGGTAT GGCATTCA TGCCGAGTGA TGTAATAAT	240
GTGACCCTGA GCTGTGAAGT GCAGTCAAGT CCAACTACCT TACTGGTAAA TGTTAGTGGA	300
AAATTTTATG AGTATATGCT GAAAGGAGAG ATACTCGAG	339

(2) INFORMATION FOR SEQ ID NO:459:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 256 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:459:

GAATTCGGCC TTCATGGCCT ACTTATTTTT GTTCTGTGT GTTTGTTTA AATGTGTGTG	60
CGCTCATGTG AGTTTGAAGG GAGTTAGATG CAACAGCAGG AGCTGTGCTC AGGGCAGTGG	120
TGTTAATTAT GGAGGGCGTG GGAAGGGCTG GGAAGAGGAG GGGGTGTAA GACTCCCTT	180
TTCCCTCGCA TGTAACAGA TGCTGGTGAC TGAAGTCTG TCTGCGGTTA TTGGCAAGAG	240
TGACGGAAAG CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:460:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 320 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:460:

GAATTCGGCC TTCATGGCCT AATTGAAAA TTCATAAGT TCTACCAATA CTCCAATTT	60
CAATCCAACA TCTGAGGATC TCCCTAGATT TCCTATTTCC ATGATTATAA CTCTGTACC	120
AGATGATAAG AAACATGGAT CTGACTATAC TCAATTTATT CACATATTTT CTCAGTGAAC	180
TAACTTATTT GCTGAATATA ACCAGTCCCC AGCCTTCCAA CTGCCTCTCT CACTTGCCAC	240
CTCTGCATCT TCCCCCACTG TCTTCTCTAG CAATCAGACT GCCTCTTGCC AAGTCATCAC	300
CACAGCACCC CACTCTCGAG	320

(2) INFORMATION FOR SEQ ID NO:461:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:461:

GAATTCGGCC TTCATGGCCT ACCCTCTACT ATTTTGAAC CAAATCAACA ACAACCTATT	60
TAGCTGTTCC CCAACCTTTT CCTCCGACCC CCTAACAACC CCCCTCTAA TACTAATAC	120
CTGACTCCTA CCCCTCACA TCATGGCAAG CCAACGCCAC TTATCCAGTG AACCCTATC	180
ACGAAAAAAA CTCTACCTCT CTATACTAAT CTCCCTACAA ATCTCCTTAA TTATAACATT	240

CACAGCCACA GAACTAATCA TATTTTATAT CTCTCTCGAA ACCACACTTA TCCCCACCCA 300
TCTCGAG 307

(2) INFORMATION FOR SEQ ID NO:462:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 254 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:462:

GAATTCGGCC TTCATGGCCT AGTACAATTT AATATAATTT CTTACAAGTT TATTACCTAA 60
 AACTTTGCAA ATAATGAAG TTAGAAGCTT TGGATTTTGT TTTAGAGCT TAATCCTTTT 120
 CTGTAAGTGG AAATCCTTTC CACTGGTTTA TTTTCCTTTT GATTTTATTT TACTTTGACA 180
 CCCTAAGGT TTAGTGTTCC TGTTTTTAA TCTACTGATC GTTTCCTATG AGATTCCTTA 240
 GAGTACCCCT CGAG 254

(2) INFORMATION FOR SEQ ID NO:463:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 283 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:463:

GAATCTAGA CCTGCCTCGA GAGGACGCCG GAGAGAAATG AGTAGCAACA AAGAGCAGCG 60
 GTCAGCAGTG TTCGTGATCC TCTTTGCCCT CATCACCATC CTCATCCTCT ACAGCTCCAA 120
 CAGTGCCAAT GAGGTCTTCC ATTACGGCTC CCTGCGGGGC CGTAGCCGCC GACCTGTCAA 180
 CCTCAAGAAG TGGAGCATCA CTGACGGCTA TGTCCCCATT CTCGGCAACA AGGTAGCGCA 240
 GCTGCTTTGG GGAGCTCCTC CTTACTGCCC AGCAAACTC GAG 283

(2) INFORMATION FOR SEQ ID NO:464:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 233 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:464:

GAATTCGGCC TTCATGGCCT AAAAAGTGGT TCCTATTTTC CTGGTTGAAC CTTGAGTGAT 60
 ACACCCAGTA TTGTACCACC CAATTAGTAG ACATTATTTT TTCTTAGGTC ATATTATTCT 120
 CAGCTTATAG AGCAAGAAGT TGAAGCTTAA AGGGTTAGAT TACTTGCCCA AGGTAATACA 180
 GCAAGAATCT TATTTATCC AACCTAGAGT GAATATTTCC CCCACATCTC GAG 233

(2) INFORMATION FOR SEQ ID NO:465:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:465:

```

GAATTCGGCC TTCATGGCCT ACTGATGTTG AAGACGACAC CACGGCTTTG ATGGAATATC      60
AGATATTGAA AATGTCTCTC TGCCTGTTCA TCCTTCTGTT TCTCACACCT GGTATTTTAT      120
GCATTTGTCC TCTCCAATGT ATATGCACAG AGAGGCACAG GCATGTGGAC TGTCAGGCA      180
GAAACTTGTC TACATTACCA TCTGGACTGC AAGAGAATAT TATACATTTA AACCTGTCTT      240
ATAACCACTT TACTGATCTG CATAACCAGT TAACCCAATA TACCAATCTG AGGACCTGG      300
ACATTTCAAA CAACAGGCTT GAAAGCCTGC CTGCTCACTT ACCTCGGTCT CTGTGGAACA      360
TGTCTGCTGC TAACAACAAC ATTAACTTC TTGACAAATC TGATACTGCT TATCAGTGGA      420
ATCTTAAATA TCTGGATGTT TCTAAGAACA TGCTGGAAAA GGTGTGCTCT ATTAAAAATA      480
CACTAAGAAG TCTCGAG                                         497

```

(2) INFORMATION FOR SEQ ID NO:466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:466:

```

GAATTCGGCC TTCATGGCCT AGCCCCGACT AGCTTTGCCC TAACTCCTTC ATCAAAAGAC      60
CCCCCGCCAG CTTCCACAC CTCATACGCA GCCACATCTG CCCTATTCTC CATGCTTTCC      120
AGCTTGCCCTG CCCTTCCTCA TCTCTCCCTG CCTGTGCAGA CCTCCACCCT TCTTTCCTCC      180
ACCCCTCCAT CCCCCAATGC TTGTAGACCT TCCATTCACT CCGTCTCATC GTGCGTGGTC      240
TCTGATCGTC CATCACCTGA CCTCGAG                                         267

```

(2) INFORMATION FOR SEQ ID NO:467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 152 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:467:

```

GTTTACATAA ATATTATACT AGCATTTACC ATCTCACTTC TAGGAATACT AGTATATCGC      60
TCACACCTCA TATCCTCCCT ACTATGCCTA GAAGGAATAA TACTATCGCT GTTCATTATA      120
GCTACTCTCA TAACCCTCAA CACCACTCG AG                                         152

```

(2) INFORMATION FOR SEQ ID NO:468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 198 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:468:

```
CAATATTCA AGCTATACCA AGCATACAAT CAACTCCAAG CTCGGAATTT TAACTTCATG      60
GCAAACAGAA AAGCTAGACT GAGTTATCAG TGTGTGAGA GGAATATTTG GCCCAACAAG      120
AGTTGTTGGG GTGGGAGGAG GGAGAGACAA AAGGAAAGGA CTGCCAGCTC TCAGAGGGTG      180
GAGATGGGGG ACCTCGAG                                         198
```

(2) INFORMATION FOR SEQ ID NO:469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 288 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:469:

```
GAATTCGGCC TTCATGGCCT ACTGCTATAT TCAAGTTTCT CCCACTACTG TGGTTTCTTT      60
TTTTTTTTTT TTTTTTTTTT TTTTGAGACA GGGTCTTGCT CTGTCACCCA GGCTGGGGTG      120
CAGTGGTGCG ATCTCGGCTC ACTGCAAATT ACACCTCCTG GATTCGAGCA ATTCTCATGC      180
CTCAGCTTCC TGAGTAGCTG GGATAACAGG TATGCACCAC CACCCCTGGC TAATTTTGTG      240
GTTTTTAGTA GAGACAAGTT CTCACCATGT TGTCCAAGCC ACCTCGAG                                         288
```

(2) INFORMATION FOR SEQ ID NO:470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:470:

```
GAATTCGGCC TTCATGGCCT AAAAGAAGAA TACTAATTAG AATTGAGTT CTAGGGGTTT      60
TTCCTAGGTT TTTCATTCTA GACTTAGCTT TTATTCAAAC CTGTTGATCC TGCATAGGGG      120
TAGTCTAGCT TTAATAAATA AAACAATAAA CATAAATGAG CCTATTGAGT TCAATCAGAG      180
TAGGGAGCAG TTTTATTGAA CAGCACATTT TCAAATCTT CAGTTGTGTT TTGTTTTTCA      240
GCTACGTGTC TCTCTGTGAT AATGAAAAGA CAGGTTGCAA AGCCCGGGAA CTAAATCAG      300
TTTATGTGGA TGCAGTAGGA CTCGAG                                         326
```

(2) INFORMATION FOR SEQ ID NO:471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 326 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:471:

```

GAATTCGGCC TTCATGGCCT AGTGTAAGT GTTTTGCAC AGTGCCAGA AATTGCAGT      60
ATTTAATGGT CCTTCCTCT TATTATTTT TATTACTGT TTTGTTTTT TTGAGACAGT      120
GTCTTGCTCT GTCGCCCAGG CTGGAGAGCA GTGATATTAT CGTGACTCAC GGCAGCCTCG      180
ACCTCCCAGA CTCAGGTGAT CCCTTCACCT CAGCCTCCCA GGCAGCTGGG ACCATAGCTA      240
TGAACAAACA CGTCCAGCTA TGTTTGTAT TTTTGTGAA GACGGAGTCT CACCATGTTG      300
CCCAGGCTGA TCTCCAATC CTCGAG                                         326

```

(2) INFORMATION FOR SEQ ID NO:472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:472:

```

GGAAAGGTGT TGTCCCTTGT AACATTTTGG TTGGCTATAA AGCTGTATAT CGTTTGTGCT      60
TTGGTTTGGC TATGTTCTAT CTTCTTCTCT CTTTACTAAT GATCAAAGTG AAGAGTAGCA      120
GTGATCCTAG AGCTGCAGTG CACAATGGAT TTTGGTTCTT TAAATTTGCT GCAGCAATTG      180
CAATTATTAT TGGGGCATTG TTCATTCCAG AAGGAACCTT TACAACCTGTG TGGTTTTATG      240
TAGGCAACCT CGAG                                                         254

```

(2) INFORMATION FOR SEQ ID NO:473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:473:

```

GAATTCGGCC TTCATGGCCT ACAGAAATCT AATTCCTGGT GCTATTTGCA ACTACATATA      60
TTTAAATAC AAGGAGATAA ATACCCAGAA CACATTAAGC CTACTGATTT AAACAGAACA      120
TTTCAAGACT GCTACACAGA AAGGGAAGGA AGCTGTTAAC CCAGCACAGC AGCACACCTC      180
ACATATTTAC GTCTCAGAGA TTAAATGGAA AGAAAGGATC AATCAAAACC TTTAATGCTC      240
AGTTTTCACA AACACAGTCA AGTCTATCAA ATTTCCAGAT TTACAG                                         286

```

(2) INFORMATION FOR SEQ ID NO:474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:474:

```

GAATTCGGCC TTCATGGCCT ACAATTAAAA GGTCTGTGTA AATTACGTCT TTCAGTCTGA      60
AATTACTCTG AGAATTTACT TAAAATTTT CCATTTAAAA ACAGGTATAA AATTAATTGC      120
TAGTTTCCAT AATCACCCAG TATAAAGATA GAAAAGACCT GTAAGACAAC TGTGTGGTTA      180

```



```

AATACATGAT AACACATTTA CGTGCCTTTT ATAGAAATCC ACTTATTATG TACATACTGG      240
CTTGTTTTTT TTCCCACTTC TCCAGTACAC TATTTCAGGC ACAGGCTCAA AATTGAACC      300
CAAAATGGTCT GTTAGGTCTC TTGACTTTTT CAGTTCAAAG CTCTGCTAAT CTGCTAAACC      360
TAGCCCCAAA CCCACTCGAG                                         380

```

(2) INFORMATION FOR SEQ ID NO:475:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 254 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:475:

```

GAATTCTAGA CCTGCCCGGA GCCCTGACCT AGTCCGGCGT GGAGAGAGGA ATGGAAAGCA      60
GTGTCCCTTT TGAGAAGGCA AATTACAGC TGGCTTTTGT AATCCTAGCT ATTTTTTGTT      120
TGTTTGCTAA GTCTTGATA GTCCCACTG TGGTTTGCTT GCCAGTGATC TCAGCACCAC      180
CAGAGAGCTT GTTAGAAATG CGGCATCCCA ACCCCACCAC AGCCCTCCCA AGTCAGATAC      240
TCCCCCTCT CGAG                                         254

```

(2) INFORMATION FOR SEQ ID NO:476:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 389 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:476:

```

GAATTCGCTG TGGAGCTGGG CGTGCTGTTT GTCCGGCCCC GGCCCGGAAC CGGGCTGGGT      60
AGAGTGATGC GGACCCTCCT GCTGGTGCTG TGGCTGGCGA CGCGCGGAAG CGGCTCTAC      120
TTTCACATCG GAGAGACGGA GAAGAAGTGC TTTATTGAGG AGATCCCGGA CGAGACCATG      180
GTCATAGGAA ACTACCGGAC GCAGCTGTAT GACAAAGCAG GGGAGGAGTA CCAGCCGGCC      240
ACCCCGGGGC TTGGCATGTT TGTGGAGGTG AAGGACCCAG AGGACAAGGT CATCTGGCC      300
CGGCAGTATG GTTCGAGGG CAGGTTCACT TTCANTTCCC ATACCCNTGT GTGAGCACCA      360
GATCTGTTTT CANTCCAATT CCACTCGAG                                         389

```

(2) INFORMATION FOR SEQ ID NO:477:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 431 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:477:

```

GAATTCGGCC TTCATGGCCT AGAAGGAAAT AAAGGCCCGG ATTTCTGGAG TTCTGAGCCT      60
ACTTTTTTTG GGTGCATTTT GAAACATACG GATTTTACCG CTAGTATATT CAGTGAGGAA      120
GGAAGGCTTC TGAAGGATTG ATGATCCCCA AACTGGATTA TGTGTCATG ATAATGGTGT      180
ATTTGGTGCC CTAGCATAGT GAGGTGAGGT AGGTCTTTAA AATGGCTCAT TATAAACATC      240

```

```

ATTGTTCTTG AGCTCACTTG CCCTTGCATC TCCTGCCAGA GTGCTTTGTA CATAGTAGGC      300
CCTCATCAAT GCTTGTAGAT TTTAAATTCG GAGGCACACT TGAAGACAA TGGTGGCTGG      360
TAAATTAATT ATCAGGGTTA GCAACTTCAT TTCTGCTNAC GCTTAAAAAG TGCTGCGCGA      420
GGAAACTCGA G                                     431

```

(2) INFORMATION FOR SEQ ID NO:478:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 426 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:478:

```

GCCTCTGNTT TTAATTCATT GGCAACTGTT ACGATGGAAG ACCTGATTGC ACCTTGGTTC      60
CCTGAGTTCT CTGAAGCCCG GGCCATCATG CTTTCCAGAG GCCTTGCCTT TGGCTATGGG      120
CTGCTTTGTC TAGGAATGGC CTATATTTCC TCCCAGATGG GACCTGTGCT GCAGGCAGCA      180
ATCAGCATCT TTGGCATGGT TGGGGGACCG CTGCTGGGAC TCCTTGCCTT TGGAAATGTT      240
TTTCCATGTG CTAACCCCTCC TGGTGCTGTT GTGGGCCTGT TGGCTGGGCT CGTCATGGCC      300
TTCTGGATTG GCATCGGGAG CATCGTGACC AGCATGGGCT TCAGCATGCC ACCCTCTCCC      360
TCTAATGGGT CCAGCTTCTC CCTGCCACC AATCTAACCG TTGCCACTGT GACCACACTT      420
CTCGAG                                     426

```

(2) INFORMATION FOR SEQ ID NO:479:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 325 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:479:

```

GAATTCGGCC TTCATGGCCT AAATTTTCAG GCAGTTTGAA GTATCTGGCA GAAAAAGTAA      60
ATTGAAATCA TTGGGACGTT GATTTTAA TACCTAGAA GCAATCCCAA TGCTTTATGT      120
AATACTAAAA TTTCTCCTCT CTCTTTCTT TATCTCTCTC TCCCCTGAAA ATAATCATT      180
TTTTTCAGT GCCAGTTCAG ATCTTGGCAA CAGTTGTTT GAAAAAGTAC CTGAACAAAA      240
TACATTTTAT AAAGTAAAGT ATTCAGGAAC TGACAGAAGT GGAGAAGAAT ATATTTATGT      300
TACAGAAGTC ATGGACAACC TCGAG                                     325

```

(2) INFORMATION FOR SEQ ID NO:480:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:480:

```

GGCAAGTAAC AGGTTGCAAG AATTGGAGGC AGAGCAACAG CAGATCCAAG AAGAAAGAGA      60
ATTACTGTCC AGACAAAAGG AAGCTATGAA AGCAGAGGCA GGCCAGTTG AACAAACAATT      120

```

```

ACTACAGGAG ACAGACAAAT TAATGAAGGA AAAACTAGAA GTACAATGTC AAGCTGAAAA      180
AGTACGTGAT GACCTTCAAA AACAAAGTGAA AGCTCTAGAA ATAGATGTGG AAGAACAAGT      240
CAGTAGGTTT ATAGAGCTGG AACAGAAAAA AAATACTCAA CTAATGGATT TAAGACAGCA      300
AAACCAAGCA TTGGAAAAGC AGTTAGAAAA AATGAGAAAA TTTTAGATG AGCAAGCCAT      360
TGACAGAGAA CATGAGAGAG ATGTATTCCA ACAGGAAATA CTCGAG                        406

```

(2) INFORMATION FOR SEQ ID NO:481:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 357 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:481:

```

GAATTCGGCC AAAGAGGCCT AGTCGGTGCC TCATTGGTAT AAATGTTATG TCTGCATGGG      60
TTTTTCTAC AATTCTTTC TAAGATTATT TCTCCCAAA GCTCAGCACT TTTGGAATTT      120
TTCATTCTCA TCCAAAAATG GAAGCAATTT TATGTAAATG TCTCTGGAA GCAGTGTGG      180
AATTCATATT TTGGGTAGCA GAAGCAGTAG TTACAAGGCT AGTGGTGTCT TTTGTGGTGG      240
TGGTGGCACC TGCTGCAGTT GTTCATATTT GGGGTGCAGG AGTAGGGAGG GTAGGATCAG      300
TTGGAGAATT TACAGGGAAA AATGCAGGTC CAGGTGGATA GGGTCTAGAA TTCAATC      357

```

(2) INFORMATION FOR SEQ ID NO:482:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 303 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:482:

```

GAATTCGGCC AAAGAGGCCT AAGTGAATCC AGAGCCTCCT GCAAGATGCT GTTGATTCTG      60
CTGTCAGTGG CCTTGCTGGC CTGAGCTCA GCTCAGAACT TAAATGAAGA TGTCAGCCAG      120
GAAGAATCTC CCTCCCTAAT AGCAGGAAAT CCACAAGGAG CACCCCAACA AGGAGGCAAC      180
AAACCTCAAG GTCCCCATC TCCTCCAGGA AAGCCACAAG GACCACCCCA ACAAGGAGGC      240
AACCAGCCTC AAGGTCCCCC ACCTCCTCCA GGAAAACCAC AAGGACCACC CCCTATTCTC      300
GAG                                                                303

```

(2) INFORMATION FOR SEQ ID NO:483:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 469 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:483:

```

GAATTCGGCC AAAGAGGCCT AAGCAGACAC AATGGTAAGA ATGGTGCCTG TCCTGCTGTC      60
TCTGCTGCTG CTTCTGGGTC CTGCTGTCCC CCAGGAGAAC CAAGATGGTC GTTACTCTCT      120
GACCTATATC TACACTGGGC TGTCCAAGCA TGTGAAGAC GTCCCGCGT TTCAGGCCCT      180

```

TGGCTCACTC AATGACCTCC AGTTCTTTAG ATACAACAGT AAAGACAGGA AGTCTCAGCC	240
CATGGGACTC TGGAGACAGG TGGAAAGGAAT GGAGGATTGG AAGCAGGACA GCCAACTTCA	300
GAAGGCCAGG GAGGACATCT TTATGGAGAC CCTGAAAGAC ATCGTGGAGT ATTACAACGA	360
CAGTAACGGG TCTCACGTAT TGCAGGGAAG GTTTGGTTGT GAGATCGAGA ATAACAGAAG	420
CAGCGGAGCA TTCTGGAAAT ATTACTATGA TGGAAAGGAC AAACCTCGAG	469

(2) INFORMATION FOR SEQ ID NO:484:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 516 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:484:

GAATTCGGCC AAAGAGGCCT ACTACTTCTG TAGTCTCATC TTGAGTAAAA GAGAACCCAG	60
CCAACTATGA AGTTCCTTGT CTTGCCTTC ATCTTGGCTC TCATGGTTTC CATGATTGGA	120
GCTGATTCAT CTGAAGAGTA TGGGTATGGC CCTTATCAGC CAGTTCCAGA ACAACCACTA	180
TACCCACAAC CATACCAACC ACAATACCAA CCTGCCTCAA GGTCCCTCCAC CTCCTCCAGG	240
AAAGCCACAA GGACCACCCC CACAAGGAGG CAACAAACCT CAAGGTCCCC CACCTCCAGG	300
AAAGCCACAA CGACCACCCC CACAAGGAGG CAGCAAGTCC CGAAGTTCTC GATCTCTCC	360
AGGAAAGCCA CAAGGACCAC CCCCAAGG AGGCAACAAA CCTCAAGGT CCCCACCTCC	420
AGGAAAGCCA CAAGGACCAC CCCCAAGG AGGCAAGCAAG TCCCGAAGTG CCCGATCTCC	480
TCCAGGAAAG CCACAAGGAC CATCCACAA CTCGAG	516

(2) INFORMATION FOR SEQ ID NO:485:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 357 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:485:

GAATTCGGCC AAAGAGGCCT ACTTCACTTC AGCTTCACTG ACTTCTTGAC TCTCCTCTTG	60
AGTAAAAGGA CTCAGCCAAC TATGAAGTTT TTTGTCTTTG CTTTAGTCTT GGCTCTCATG	120
ATTTCCATGA TTAGCGCTGA TTCACATGAA AAGAGACATC ATGGGTATAG AAGAAAATTC	180
CATGAAAGC ATCATTACA TCGAGAATTT CCATTTTATG GGGACTGTGG ATCAAATTAT	240
CTATATGACA ATTGATATCC TTAGTAATCA TGGGGCATGA TTATAGAGGT TTGACTGGCA	300
AATTCACTTT TACTCATTTA TTCTATTCA TCACACCGCA AGTCTAGGCC TCTCGAG	357

(2) INFORMATION FOR SEQ ID NO:486:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 643 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:486:

```

GGTTACCATC CTCAAAGGAT TGGCTAAAAG CAAGCAACTG GATTGAACAC CCTAAGAAGA      60
AAGATTCACT CTGCACCAGG AGACATCAGA AAGAATGAAA ACTCTGCCGC TGTGTGTGTG      120
CATCTGTGCA CTGAGTGCCT GCTTCTCGTT CAGTGAAGGT CGAGAAAGGG ATCATGAACT      180
ACGTCACAGG AAGGCATCAT CACCAATCAC CCAAATCTCA CTTTGAATTA CCACATTATC      240
CTGGAAGTCT AGCTCACCAG AAGCCGTTCA TTAGAAAGTC CTATAAATGT CTGCACAAAC      300
GCTGTTAGGC CTAAGCTTCC ACCTTCACCT AATAACCCCC CCAAATTCCT AAATCCTCAC      360
CAGCCACCTA AACATCCAGA TAAAAATAGC AGTGTGGTCA ACCCTACCTT AGTGGCTACA      420
ACCCAAATTC CATCTGTGAC TTCCCATCA GCTTCCACCA AAATTACTAC CCTTCCAAAT      480
GTGACTTTTC TTCCCAGAA TGCCACCACC ATATCTTCAA GAGAAATGT TAACACAGGC      540
TCTTCTGTAG CTACATTAGC ACCCAGTGAA TTCCCAGCT CCACAAGACA CCACAGCTGC      600
CCCACCCACA CCTTCTGCAA CTACACCAGC TCCACCCCTC GAG                          643

```

(2) INFORMATION FOR SEQ ID NO:487:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 335 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:487:

```

GAATTCGGCC AAAGAGGCCT ACAAGATGCT GCTGGTCCTG CTCTCAGTGG TCCTTCTGGC      60
TCTGAGCTCA GCTCAGAGCA CAGATAATGA TGTGAATAT GAAGACTTTA CTTTACCACAT      120
ACCAGATGTA GAGGACTCAA GTCAGAGACC AGATCAGGGA CCCAGAGAC CTCCTCCTGA      180
AGGACTCCTA CCTAGACCCC CTGGTGATAG TGGTAACCAA GATGATGGTC CTCAGCAGAG      240
ACCAACAAAA CCAGGAGGCC ATCACCAGCA TCCTCCCCCA CCTCCTTTTC AAAATCAGCA      300
ACGACCACCC CAACGAGGAC ACCGTTTCATC TCGAG                          335

```

(2) INFORMATION FOR SEQ ID NO:488:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 323 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:488:

```

GAATTCGGCC AAAGAGGCCT AGACACATTG CTTTCTGTTT TCTCCAGCAT GCGCTTGCTC      60
CAGCTCCTGT TCAGGGCCAG CCCTGCCACC CTGCTCCTGG TTCTCTGCCT GCAGTTGGGG      120
GCCAACAAAG CTCAGGACAA CACTCGGAAG ATCATAATAA AGAATTTTGA CATTCCCAAG      180
TCAGTACGTC CAAATGACGA AGTCACTGCA GTGCTTGCAG TTCAAACAGA ATTGAAAGAA      240
TGCAATGGTG TTAACACTTA CCTCATTAGC AGCATCCCTT CTACAAGGTG CATTTAACCTA      300
TAAGTATAAC TGCCAACCTC GAG                          323

```

(2) INFORMATION FOR SEQ ID NO:489:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 128 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:489:

```

GAATTCGGCC AAAGAGGCCT AGTGACACCA GAGCCTCCTG CAAGATGCTT CTGATTCTGC      60
TGTCAGTGGC CCTGCTGGCC TTCAGCTCAG CTCAGGATTT AAATGAAGAT GTCAGCCAGG      120
AAGATGTT                                     128

```

(2) INFORMATION FOR SEQ ID NO:490:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 366 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:490:

```

GAATTCGGCC AAAGAGGCCT AATTTTGACC AGCAGATTAA TCAACTGTAA GACGGATCCT      60
CACACAAAGA GGCAACTGAA AGGATGAAAT CACTGACTTG GATCTTGGGC CTTTGGGCTC      120
TTGCAGCGTG TTTCACACCT GGTGAGAGTC AAAGAGGCCC CAGGGGACCA TATCCACCTG      180
GACCGCTGGC TCCTCCTCAA CCTTTTGGCC CAGGATTGT TCCACCACCT CCTCCTCCAC      240
CCTATGGTCC AGGGAGAATC CCACCTCCTC CTCTGCAGAG AAAACCTTTG AAGAAAAGCA      300
GGAACAGAGA TCGATGGCGA TCTATTTCCC TGTACTATAC TGGAGAGAAA GGTCAAAATC      360
GTCGAG                                     366

```

(2) INFORMATION FOR SEQ ID NO:491:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 296 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:491:

```

GGTTTCCCGT TTGTCCTCC TTCAAGGTTT TTTTCAGCAG CTGCAGCACC CGCTGCCCA      60
CCTATTGCAG CTGAGCCTGC TGCAGCTGCA CCTCTTACAG CCACACCTGT AGCAGCTGAG      120
CCTGCTGCAG GGGCCCCTGT TGCAGCTGAG CCTCCTGCAG AGGCACCTGT TGGAGCTGAG      180
CCTGCTGCAG AGGCACCTGT TGCAGCTGAG CCTGCTGCAG AGGCACCTGT TGGAGTGGAG      240
CCAGCTGCAG AGGAACCTTC ACCAGCTGAG CCTGCTACAG CCAAGCCTAG GCCTCT      296

```

(2) INFORMATION FOR SEQ ID NO:492:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 535 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:492:

```

CTCGAGTCCT TGTGGCTTTC CTGGAGGTGG GGGACCTTGA GGTTTGTGTC CTCCTTGTGG      60
GGGTGGTCCT TGTGGCTTTC CTGGAGGAGG TGAAGGACCT TGAGGCTGGT TGCCTCCTTG      120

```

TGGGGGTGGT	CCTTGTGGCT	TTCCTGGAGG	AGATCGGGGA	CTTCGGGGAC	TTGTCTCCTT	180
GTGGGGGTGG	TCCTTGTGGC	TTTCCTGGAG	GTGGGGGACC	TTGAGGTTTG	TGCGCTCCTT	240
GTGGGGGTGG	TCCTTGTGGC	TTTCCTGGAG	GAGGTGGGGG	ACCTTGAGGC	TGGTTGCCTC	300
CTTGTGGGGG	TGGTCCTTGT	GGCTTTCCTG	GAGGAGATGG	GGGACCTTGA	GGTTTGTTCG	360
CTCCTTGTGG	GGGTGCTCCT	TGTGGATTTC	CTGCTATTAG	GGAGGGAGAT	TCTTCCTGGC	420
TGACATCTTC	ATTAAAGTTC	TGAGCTGAGC	TCAGGGCCAG	CAGGGCCACT	GACAGCAGAA	480
TCAACAGCAT	CTTGCAAGAG	GCTCTGGAGT	CACCTAGGCC	TCTTTGGCCG	AATTC	535

(2) INFORMATION FOR SEQ ID NO:493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:493:

GAATTCGGCC	AAAGAGGCCT	AGTCGGTAAT	CACAACAAAC	ACGGAGCAAT	CTCAATGCTG	60
TTTATCCGGA	GGACAGTCTG	CGGGGTCGTG	ACGATTCTTT	TCTTCTTGAA	GTTTTTCCTT	120
TTCTGAATC	TCATAATGAT	TCTTGCCCAT	GATTCTGTCT	TTTCAATGAC	TGTGGCTTCT	180
ACTCGAACAA	GATCCTTTCC	GAGGAGTGGC	TTGCCAAGCA	GCGTGAAGTT	GTCTGCCCCA	240
ACCAGCAGGA	CCTTCTCCAG	TGCAATTCTC	TCTCCACACG	CAAGGTCTAG	TTCATTTCGA	300
ATTAAAGTCA	GGTCTTCAGA	G				321

(2) INFORMATION FOR SEQ ID NO:494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:494:

GAATTCGGCC	AAAGAGGCCT	AACCTGCCTT	GGTCTTGCT	CCTCTTTCCA	CGTTGGATAA	60
CAATTTTTTG	GTTGTTTTGT	TAAAGTTGGT	GCTCTGAAGC	TTAATCTCAG	TACCCCTTAC	120
TCTGAATTGT	CAAATTTTGA	TAAAACGTGC	CATTTTCTTT	GGTAAGAGAA	AGCAGGTCTT	180
AATGTCTGCC	AGAACACAAT	TTATATGCCT	TATTGGCTTC	ATTAAACTTT	TAGAAAACCT	240
TAGCATTTGT	TACTTTTTTC	CATTGCATTT	ACTTTCAAAT	GCACCTAATG	AATTTCGTCAC	300
CCAGTCGCAA	CTTTCCCTT	CTCTGTCCCA	TTGCTTTCTC	CTTTCCCCAA	CGCAGCTCGA	360
G						361

(2) INFORMATION FOR SEQ ID NO:495:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 435 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:495:

```

GAATTCGGCC AAAGAGGCCT AAAGCGACCA AGATAAAAGT GGACAGAAGA ATAAGCGAGA      60
CTTTTATCC ATGAAACAGT CTCCTGCCCT CGCTCCGGAA GAGCGCTACC GCAAAGCCGG      120
GTCCCAAAG CCGGTCTTGA GAGCTGATGA CAATAACATG GGCAATGGCT GCTCTCAGAA      180
GCTGGCGACT GCTAACCTCC TCCGGTTCCT ATTGCTGGTC CTGATTCCAT GTATCTGTGC      240
TCTCGTTCCT TTGCTGGTGA TCCTGCTTTC CTATGTTGGA ACATTACAAA AGGTCTATTT      300
TAAATCAAAT GGGAGTGAAC CTTTGGTCAC TGATGGTGAA ATCCAAGGGT CCGATGTTAT      360
TCTTACAAAT ACAATTTATA ACCAGAGCAC TGTGGTGTCT ACTGCACATC CCCACCAACT      420
AGGCCTCTTT GGCCG                                     435

```

(2) INFORMATION FOR SEQ ID NO:496:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 122 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:496:

```

GAATTCGGCC AAAGAGGCCT AGAAATATAT TTTCTAGTGA ATTCTTATTG GAAGCCAGGT      60
CTCTCCTCTC ATTAGATCAA AAGGGACTTA TGTACATACA ACAATTGAAA GTGTTACTCG      120
AG                                     122

```

(2) INFORMATION FOR SEQ ID NO:497:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:497:

```

GAATTCGGCC AAAGAGGCCT AAGAAAATCA GCCTGTCTGC TCTCTCCTTG GCTCAACAAG      60
GCCTCTAACA GTCTTCTGTC CTCTATTCTG CACACGGCAT ATTTGGGAAC GAGAAACAAA      120
AGTTTCCCA AATGAAGAGA ACTCACTTGT TTATTGTGGG GATTTATTTT CTGTCCTCTT      180
GCAGGGCAGA AGAGGGGCTT AATTTCCTCA CATATGATGG GAAGGACCGA GTGGTAAGTC      240
TTTCCGAGAA GACCCTCGAG                                     260

```

(2) INFORMATION FOR SEQ ID NO:498:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 48 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:498:

```

GAAAGAGGCC TACCAACATG CCAGAGGCCG TACCCATATC CGCAGCAG      48

```

(2) INFORMATION FOR SEQ ID NO:499:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:499:

```

GAATTCGGCC TTCATGGCCT ACCCTGTCAA AATTTTGCCT CCTCTTGATT TTCAATATAT      60
ATATATTTTT TTGTCTTACT CTGTTGCCCA GGCTAGAGTG CAGTGACGTG ACCTTGGCTC      120
ACTGCAACCT CTGCCTCCTG GGCTCAAGCA ATCCTCCAC CTCAGCCTCC TCAGTAGCTG      180
GGACCACAGG CATATGCTAC AAAGCCCAGA TTATTTTTTT ATAGAAACAG GGTTCACCA      240
TGTGCCCAG GCTTGTCTCG AACCCAGAA CTCGAG      276

```

(2) INFORMATION FOR SEQ ID NO:500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:500:

```

GAATTCGGCC TTCATGGCCT ACAAATGCCC ATCAAAGACT GGATAAGAA AATGTAGTAT      60
ATATATATAT ACCATGGAAT ACTGTGCAGC CATAAAAAAG GAATGAGATC ATGTGTTTCA      120
CAGGGATGTG GATGAAGCTG GAAGCCATCA TCCCCAGCAG ACTAACACAG GAACAGAAAA      180
CCAAACACTG CATGTTCTCA CTCATAAGTG GGAGCTGAAC AATGAGAACA GGTGGGCACA      240
GGGACGGGAA CAACACACAC CAGGGCCTGT TGTGTGGTGG GGGTGAGGGT TGGAACTCGA      300
G                                          301

```

(2) INFORMATION FOR SEQ ID NO:501:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:501:

```

GCGAGGCAGG GAAACTCACT TCACGTCTCT TTCCTTGTAG AGCATCATGC TTATTTCTGG      60
CTCACTCACA TCTTTGTCTC GGGAGTTCTC TGCCGAGCCA TTGCCCCCTA CAGCAGAGAG      120
CACAGCTGGC TGCACTAGTG CTGAAGGAGC CAGCCCCAGA GCAGGGCATT TCCAGGGGCT      180
CTTGTTCCAG AGCGGCAGGC GTTGTGTGCA GAGAACGCCC CTCCCACGCA GCACAGAGAA      240
CGCGGGGTGG GTGTGTGGCT CCGGGCCTGT GGGGCTTAGG CTGCCTGAAC CACCGCCGAC      300
TGGCACCATG ACTCGGCATT CCTGGAAGTG CCTTACCAAG TTGTTGTTGT TGTTTTGTG      360
TTTTTAAGA GACGGGCTTG CTCTATCATC CAGGCTCGAG      400

```

(2) INFORMATION FOR SEQ ID NO:502:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:502:

GAGATAAACA AAATTGATTG CCCCATTCCTC TCACITCCCC ATCTTGTCTT CCTAGACCCC	60
ACAGAGTTAA AACTTGGGAT TCCCCTGGCC CCCCCAGAAC ACTTGTATAT TGTTTGTTTG	120
AGGTTTCGTGC CGCAGTAACA GACACAGTAT TTAATTGCAC ATACAGATGT TTGCTGGGTA	180
TATTCAGTGT AAATTTTATT TAATCTGTTT TTTTGTGTTT TTGGGGGTTA TTTGGGGGGA	240
GGTTGGTTT GTTTTAAAT ATAAAAAAA AAATCTGTCA CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:503:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:503:

GGCCTCACCT TACCCAGGA CTCCGCTATG ACACCGCCTC TGCCCTACA AGACACAGAT	60
CTCTCGTCAG CCTCAAAGCC TGTGGCTGCA GCCACGCCTG TGTCCAGCA GGCTGAAGAG	120
GGCCTCACCT TACCCAGGA CTCCGCTATG ACAGCACCTC TGCCTCTGCA AGACACAGGC	180
CCCACCTCAG GTCCAGAGCC TCTGGCTGTG GCCACCCCTC AAACCTTGCA GGCAGAAGCA	240
GGCTGTGCCC CAGGGACAGA GCCTGTGGCC ATACTCGAG	279

(2) INFORMATION FOR SEQ ID NO:504:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 306 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:504:

GCAATGGCAG GAATTCGAAA TATTGGCATA TGGTTCTTTT GGATTAGATT ATATAAATC	60
AGAAGAGGTA GAACCAGGCC CCAAGCACTC CTTTTCTCT GCATGATACT TCTGCTTATT	120
GTCCTTCACA CTAGCTACAT GATTATAGT CTTGCTCCCC AATATGTTAT GTATGAAGC	180
CAAATTAAT TAATAGAGAC TAATATAACT TCTGATAATC ATAAAGGCAA TTCAACCTT	240
TCTGTGCCAA AGAGATGTGA TGCAGAAGCT CCTGAAGATC AGTGTAAGT TACCCGACG	300
CTCGAG	306

(2) INFORMATION FOR SEQ ID NO:505:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 361 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:505:

GAATTCGGCC TTCATGGCCT AAGGAGAATG GCGTGACCC GGGAGGCGGA GCTTGCAGTG	60
AGCCAACATC ACGCCACTGC ACTCCAGCCC GGGCGACTGA GCGAGACTCT CTCTCNAAAA	120
AAAAAAAAAA AAAGAAAAAG AAAAAGAAAA AGAAAAAGAA AAGAAAATAT ATANATACAC	180
ACAGAGAGTG AGAGAGAGAG AGAGAGAGAG ACCAGAAAAA GAGAGAAGGA GAAAGAGAGA	240
ATGCAAAAAC CAAGAGGANA GAATGATCCA CTCTCCAAC AGAAAGGTAG CTCTCAATCT	300
GAAAAGTCAC TTGATTACTT TGTCTATTTT GCTTATCTGC TACATCAATG GTTCCCTCGA	360
G	361

(2) INFORMATION FOR SEQ ID NO:506:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:506:

GAATTCGGCC TTCATGGCCT AGGCCTTTTC TTTTAAAGG AATCAAGCA GGATACGTTT	60
TTCTGTGGG CATTGACTAG ATTGTTTGCA AAAGTTTCGC ATCAAAAACA ACAACAACAA	120
AAAACCAAC AACTCTCCTT GATCTATACT TTGAGAATTG TTGATTCTT TTTTTATTC	180
TGACTTTTAA AAACAACCTT TTTTCCACT TTTTAAAAA ATGCACTACT GTGTGCTGAG	240
CGCTTTTCTG ATCCTGCATC TGGTCACGGT CGCGCTCAGC CTGTCTACCC GCAGCACACT	300
CGAG	304

(2) INFORMATION FOR SEQ ID NO:507:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:507:

GGGGCTGCGG GGATTGACCT CCTCACTTCT GGGTTGCCAC TCGAAGCTTG CTCCGGGCAA	60
CGACCCCTGCT GCTTCCCAGA GGGAACTGT AGCCACAGA CCAGGAGAGA AGCCAAAGCA	120
CCTGCTCCAC GTCCACATCA CCCCAGGCTT CTAGCCCCCA GGGGCTTCAT CAGTGCTTCA	180
GCGCTCTCTC CCATCCCCCA CTCCCCATGT CCCTCGTGAT CCGAACTCCT AGGGCTCCGT	240
GTCCACAGG TCACCACTTC CGGCTGTCTC GAG	273

(2) INFORMATION FOR SEQ ID NO:508:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:508:

GAATTCGGCC TTCATGGCCT ACATCAATAA AATACATTCT ACACAGAATA CGCCAACCAT	60
ACACTACTCT TTTTGTATAA TAAAAATGT ATTTACTGAG CCAGTTGTGG TGGCTCGCGC	120
CTATAATCCC AGCACCTTGG AAGGCCAATG GGAGTGGATC GGTGAGGCC AGGAGTTTGA	180
GACCGGCCTG GCCAACATGG TGAATGCCG TCTCTACTGA GAATGCAGAA ATGAGCCGGG	240
CACGGTGGCA CGCACCTGTA GTCCAGGTA CTCCGATTCC TCTCGAG	287

(2) INFORMATION FOR SEQ ID NO:509:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 248 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:509:

AAGAGGCGAT GCGGGCGATG GCATCTCTCG GCGCCCTGGC GCTGCTCCTG CTGTCCAGCC	60
TCTCCCGCTG CTCAGCCGAG GCCTGCCTGG AGCCCCAGAT CACCCCTTCC TACTACACCA	120
CTTCTGACGC TGTCAATTCC ACTGAGACCG TCTTCATTGT GGAGATCTCC CTGACATGCA	180
AGAACAGGGT CCAGAACATG GCTCTCTATG CTGACGTCGG TGGAAAACAA TTCCCTTGTC	240
CACTCGAG	248

(2) INFORMATION FOR SEQ ID NO:510:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 397 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:510:

GGCGATGATT AGGCCAGACC CTCCCCATCC TCGTGAGGGC CAGAAGCTGT TGCTACACTG	60
TGAGGGTCGC GGCAATCCAG TCCCCAGCA GTACCTATGG GAGAAGGAGG GCAGTGTGCC	120
ACCCCTGAAG ATGACCCAGG AGAGTGCCCT GATCTTCCCT TTCCTCAACA AGAGTGACAG	180
TGGCACCTAC GGCTGCACAG CCACCAGCAA CATGGGCAGC TACAAGGCCT ACTACACCCT	240
CAATGTTAAT GACCCAGTC CGGTGCCCTC CTCCTCCAGC ACCTACCAG CCATCATCGG	300
TGGGATCGTG GCTTTCATTG TCTTCTGCT GCTCATCATG CTCATCTTCC TCGGCCACTA	360
CTTGATCCGG CACAAAGGAA CCTACCCTAC ACTCGAG	397

(2) INFORMATION FOR SEQ ID NO:511:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:511:

```

GCCTGCCTCC AGGCCTTGC TCCCACTGTT GCCTCCACTT AGAATAACAT TCCACCCCAT    60
CTCTATAAAT ATCCTACAGA CAAATACTAC CTTCCCCTTA AGGCCAGTTC TAACCCTAAC    120
TGACAACAAA TCATCTCTAC ATGATCTTTT CCTTCTGGGA ATGCCCTGCAG CACTGTTTAA    180
TCCTGCCCCA CCACCATCCC CTCACCCAGC ACCCTCTCCC AGACCAGACA GGGTGGCTCA    240
TGCTTGCAAT CCCAGCACCT TGGGAGGCTG AGGCAGGAGG ATTGCTCGAG    290

```

(2) INFORMATION FOR SEQ ID NO:512:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:512:

```

GAATTCGGCC TTCATGGCCT ACTATGCCGT CATGATAGAG AAGATGATCC TGAGAGACCT    60
GTGCCGTTTC ATGTTTGTCT ACGTCGTCTT CTTGTTCGGG TTTTCCACAG CGGTGGTGAC    120
GCTGATTGAA GACGGGAAGA ATGACTCCCT GCCGTCTGAG TCCACGTCCG ACAGGTGGCG    180
GGGGCCTGCC TGCAGGCCCC CCGATAGCTC CTACAACAGC CTGTACTCCA CCTGCCTGGA    240
GCTGTTCAAG TTCACCATCG GCATGGGCGA CCTGGAGTTC ACTGAGAACC ATGAAC TTCT    300
CGAG    304

```

(2) INFORMATION FOR SEQ ID NO:513:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:513:

```

GAATTCGGCC TTCATGGCCT AGGAACCTGG ACCGCGGCGG CGCCGGGTTT CCCTCATGAT    60
CCCGGGCGGG CGGCGGCGGC GGCAGAGGCG GCGGGAGGAT GACCTCTTAC CGGGAGCGGA    120
GTGCCGACCT GGCCTGTTTC TACACTGTCA CCGAGCCCCA GCGACACCCG AGGGGTACAG    180
CAGTATATAA GGTCACCGCC CGGGTTGTTT CACGAAGAAA TCCAGAGGAT GTCCAGGAGG    240
GAGAATCCTG AACCAACCTA TCCATGAACA TACTCTCTGC CATTTTCTTA GTCCTTTTTT    300
CGGAAAAACT CGAG    314

```

(2) INFORMATION FOR SEQ ID NO:514:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 529 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:514:

```

GAATTCGGCC TTCATGGCCT ACGAACTTAA GAAAATGAGA CTGAGCAATC TCATGGTTCT    60
TGGACAGTTA GTCTATGGCC AATTGATGGA ACCAGTAAAT CGAGAGAAGT TTACGCAGAC    120
CTTGCCCAAA ATGCCAATTC ATTCTCATGC ACAGCCCCCA GATGCCAGGG AAGAGGATAT    180

```

```

CATACTTGAA GGTCAACAGA GCCTGCCATC CCAGGCTTCA GATTGGAGCC GATACTCAAG      240
CAGCTTACTG GAATCCGTCT CTGTTCTGG AACACTAAAT GAGGCTGTTG TAATGACTCC      300
ATTTTCATCG GAACTTCAAG GAATTCAGA ACAGACCCTC CTGGAGCTGT CCAAAGGAAA      360
GCCCTCCCG CATCCAGAG CCTGGTTTGT GTCTCTTGAT GGAAAGCCAG TTGCACAAGT      420
GAGGCACTCC TTTATAGACC TGAAAAGGG CAAGAGAACC CAGAGCAATG ACACCAGTCT      480
GGA CTCTGGG GTGACATGA ATGAGCTTCA CTCAAGTAGA AAGCTCGAG      529

```

(2) INFORMATION FOR SEQ ID NO:515:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:515:

```

GGAGATGAAA GTTAAAAGTG AAAACCTTAA AGAGGAGCCT CAGTCTTCTG AAGAAGAATC      60
TATGTCTTCT GTGGAAACCA GGACACTAAT AAAATCTGAG CCTGTAAGTC CAAAGAATGG      120
TGTTTACCA CAGGCTACTG GAGACCAGAA ATCTGGTGGA AAATGTGAAA CAGACAGACG      180
CATGGTTGCA GCCAGAACAG AACCCCTAAC TCCAAACCCA GCTTCTAAGA AACCAAGAGT      240
CCACAAAAGG GGATCAGAAT CTAGTTCTGA TTCTGACTCA GATTCTGAGA GATCATCTTG      300
TTCTTCCAGA TCATCTTCTT CCTCATCATC CTCTTCTTGT CCCACTCTCG AG      352

```

(2) INFORMATION FOR SEQ ID NO:516:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 500 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:516:

```

GTCTACACCN TTCCGAGTTG GCTGCAGATT TGTGGTGCCT TCTGAGCCGT CTGTCCTGCG      60
CCAAGATGCT TCAAAGTATT ATTA AAAACA TATGGATCCC CATGAAGCCC TACTACACCA      120
AAGTTTACCA GGAGATTG ATAGGAATGG GGCTGATGGG CTTTCATCGT TATAAAATCC      180
GGGCTGCTGA TAAAAGAAGT AAGGCTTTGA AAGCTTCAGC GCCTGCTCCT GGTCATCACT      240
AACCAGATTT ACTTGGAGTA CATGTGAAAG AAAACGTCAG TCTGCCTGTA AATTTAGCA      300
AGCCGTGTTA GATGGGGAGC GTGGAACGTC ACTGTACACT TGTATAAGTA CCGTTTACTT      360
CATGGCATGA ATAAATGGAT CTGTGAGATG CACTGCTACC TGGTACTGCT TTCAGTGTGT      420
TCCCCCTCAG CCCCTCCGGC GTGTCAGGCA TACTCTGAGT AGATAATTTG TCATGCAGCG      480
CATGCAATCA GAATCTCGAG      500

```

(2) INFORMATION FOR SEQ ID NO:517:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:517:

```

GAATTCGGCC TTCATGGCCT AGATGCTCAA CACCTCCTCC TTGGTGGAGC AGCTGAACGA      60
GCAGTTTAAC TGGGTGTCCC GGCTGGCAAA CCTCACGCAA GGCGAACACC AGTACTATCT      120
GCGGGTCACC ACGGTGGCTT CCCACACTTC TGACTCGGAC GTTCCTTCCG GTGTCACTGA      180
GGTGGTCGTG AAGCTCTTTG ACTCTGATCC CATCACTGTG ACGGTCCTCG TAGAAGTCTC      240
CAGGAAGAAC CCTAAATTTA TGGAGACCGT GGCGGAGAAA GCNCTGCAGG AATACCGCAA      300
AAAGCACCGG GAGGAGTGAG ATGTGGATGT TGCTTTTGCA CCTACGGGGG CATCTGAGTC      360
CAGCTCCCCC CAAGATGAGC TGCAGCCCCC CAGAGAGAGC TCTGCACGTC ACCAAGTAAC      420
TCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:518:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:518:

```

GAATTCGGCC TTCATGGCCT AATCTTAAGG GACCTTTCCT TACTACAGAT TCAATGCGA      60
GATCTTGAGG GTTACAGGGA AACGAGGTAT CAGTTACTTC AGCTTCGACC TGCGCAGAGA      120
GCATCATGGA TTGGTTATGC TATTGCTTAC CATTATTAG AAGATTATGA AATGGCAGCA      180
AAGATTTTAG AAGAATTTAG GAAAACACAA CAGACATCCC CTGACAAGGT GGATTATGAA      240
TATAGTGAAC TACTCTTATA TCAGAATCAA GTTCTTCGGG AAGCAGGTCT CTATAGAGAA      300
GCTTTGGAAC ATCTTTGTAC CTATGAAAAG CAGATTGTG ATAAACTTGC TGTAGAAGAA      360
ACCAAGGGG AACTTCTGTT GCAACTATGT CGTTTGGA

```

(2) INFORMATION FOR SEQ ID NO:519:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 399 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:519:

```

GAATTCGGCC TTCATGGCCT ACTTATCTTA ATCCAATGGG TGACATCTTC AACAAACCCTG      60
TTCCAAATAA GGCTGCATTC TAAACACTAG GGATTAAGAC ATCAACATGT GAATTTTGGA      120
GGAATGTAGT TCTAACCATA ACAGCAGTGA ATGAGATGAC AGACTATTGC TCTCAAAAGA      180
TAGCCAGGTT TCTAGTTTCC TTAGGCATTT TCTGGAGGTT TGGCAGCAGT TCATTATTAT      240
CTTAAAAATA TTATCCAGAG CTGTGGTCTA TCAGCAGCTC ATTACCAGAC TGGCAGATAC      300
ATTTAATCAG CAAAAGAGTT GTTCCTGTGA TTAGCATCCT CCTGGTTTCC CAGCTCAAGA      360
GTTCTTCTGA GTAATAGTAA TCCTTCCCCC ATGCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:520:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:520:

```

GCTGAAGTGG TGACTTTTGA GAGAGGACAC AAAATTATCA TCAGCTCCAG TCGGAGAATC      60
CAGAAAGGAG AAGAGGTAAG AGTGTGAGAG ATTGCATCTG CCATGTTGTT CAGATCCTGG      120
GCGAATAGTT CCCTCCTCAC ACAGGTCAC TACTCACTTG TTTCCCAATT CTTTGTGTG      180
ATAAAACTC TGTCATAAT AGGCCAGATG TTCCACCCT GCAGTATCTC ACCCTTCAGG      240
CACTCCAGTT CACCTTCCTC CACATCCCTC GAG                                     323

```

(2) INFORMATION FOR SEQ ID NO:521:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:521:

```

GCTTTAAGAA TTAACGAAAG CAGTGTCAG ACAGTAAGGA TTCAAACCAT TTGCCAAAAA      60
TGAGTCTAAG TGCAATTACT CTCTCCTGG CATTGATTGG TGGTACCAGT GGCCACTACT      120
ATGATTATGA TTTTCCCTA TCAATTATG GGCAATCATC ACCAACTGT GCACCAGAAT      180
GTAAGTCCCC TGAAAGCTAC CCAAGTGCCA TGTACTGTGA TGAGCTGAAA TTGAAAAGTG      240
TACCAATGGT GCCTCCTGGA ATCAAGTATC TTTACCTTAG GAATAACCAG ATTGACCATA      300
TTGATGAAAA GGCCGCACTC GAG                                     323

```

(2) INFORMATION FOR SEQ ID NO:522:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:522:

```

GGAAAAGAA GAGAAAGCCA AGGAAGACAA GGGCAAACAA AAGTTGAGGC AGCTTCACAC      60
ACACAGATAC GGAGAACCAG AAGTGCCAGA GTCAGCATTC TGAAGAAAA TCATAGCATA      120
TCAACAGAAA CTTCTAACT ATTTGCTCG CAACTTTTAC AACATGAGAA TCTTAGCCTT      180
ATTGTGCGCA TTTGCTATCA ATTCATCTT GCTCTTTAT AAGGTCTCCA CTCCTTCTGT      240
GGTTGAAGGA AAGGAGCTCC CCACGAGGCT CGAG                                     274

```

(2) INFORMATION FOR SEQ ID NO:523:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:523:

```

CCCCCAGTCC AGATCCAGGA CTGAGATCCC AGAACCATGA ACCTGGCCAT CAGCATCGCT      60
CTCCTGCTAA CAGTCTTGCA GGTCTCCCGA GGCAGAAGG TGACCAGCCT AACGGCCTGC      120
CTAGTGGACC AGAGCCTTCG TCTGGACTGC CGCCATGAGA ATACCAGCAG TTCACCCATC      180

```


CAGTACGAGT TCAGCCTGAC CCGTGAGACA AAGAAGCAGG TGCTCTTTGG CACTGTGGGG 240
 GTGCCTGAGC ACACATACCG CTCCTCCTC GAG 273

(2) INFORMATION FOR SEQ ID NO:524:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:524:

GAATTCGGCC TTCATGGCCT ACTCTCCTAT AAAGCAGACG CCGCGCCGCG CTGCGACGCT 60
 GTAGTGGGCTT CGTCTCGGT TTTCTCTTC CTTCGCTAAC GCCTCCCGGC TCTCGTCAGC 120
 CTCCCGCCGG CCGTCTCCTT AACACCGAAC ACCATGCCTT CAATTAAGTT GCAGAGTTCT 180
 GATGGAGAGA TATTGAAGT TGATGTGGAA ATTGCCAAAC AATCTGTGAC TATTAAGACC 240
 ATGTTGGAAG ATTTGGGAAT GGATGATGAA GGAGATGATG ACCCAGTTCC TATACCAAAT 300
 GTGAATGCAG CAATATTAAA AAAGTTCATT CAGTGGTGCA CCCACCACAA GGATGACCCT 360
 CCTCCTCCTG AAGATGATGA GAACAAAGAA AAGCGAACAG ATGATATCCC TGTTGGGGAC 420
 CAAGAATTCC TGAAAGTTGA CTAAGGAACA CTCGAG 456

(2) INFORMATION FOR SEQ ID NO:525:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:525:

GAATTCGGCC TTCATGGCCT AATGGGACAA CTCCTCGCCC TCTACCTGTC CCCTCCCCCT 60
 TTGGTTGTAT GATTTTCTTC TTTTAAAGA ACCCCTGGAA GCAGCGCCTC CTTCAGGGTT 120
 GGCTGGGAGC TCGGCCCATC CACCTCTTGG GGTACCTGCC TCTCTCTC CTGTGGTGTC 180
 CCTTCCTCT CCCATGTGCT CGGTGTTGAG TGGTGTATAT TTCTTCTCCC AGACATGGGG 240
 CACACGCCCC AAGGGACATG ATCCTCTCCT TAGTCTTAGC TCATGGGGCT CTTTATAAGG 300
 AGTTGGGGGG TAGAGGCAGG AAATGGGAAC CGAGCTGAAG CAGAGGCTGA GTTAGGGGGC 360
 TAGAGGACAG TGCTCCTGGC CACCCAGCCT CTGCTGAGAA CCATTCTTGG GATTAGAGCT 420
 GCCTTTCCCA GGGAAAAAGT GTCCGACTCG AG 452

(2) INFORMATION FOR SEQ ID NO:526:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:526:

GCGATTGAAT TCTAGACCAG ACTCGTCTCA GGCCAGTTGC AGCCTTCTCA GCCAAACGCC 60
 GACCAAGGAA AACTCACTAC CATGAGAATT GCAGTGATT GCTTTGCTT CCTAGGCATC 120

```

ACCTGTGCCA TACCAGTTAA ACAGGCTGAT TCTGGAAGTT CTGAGGAAAA GCAGCTTTAC 180
AACAAATACC CAGATGCTGT GGCCACATGG CTAACCCCTG ACCCATCTCA GAAGCAGAAT 240
CTCCTAGCCC CACAGACCTT TCCAAGTAAG TCCAACGAAA GCCATGACCA CATGGATGAT 360
ATGGATGATG AAGATGATGA TGACCATGTG GACAGCCAGG ACTCCATTGA CTCGAATCGA 366
CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:527:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 408 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:527:

```

GCCCCAGTCC AGATCCAGGA CTGAGATCCC AGAACCATGA ACCTGGCCAT CAGCATCGCT 60
CTCCTGCTAA CAGTCTTGCA GGTCTCCCGA GGGCAGAAGG TGACCAGCCT AACGGCCTGC 120
CTAGTGGACC AGAGCCTTCG TCTGGACTGC CGCCATGAGA ATACCAGCAG TTCACCCATC 180
CAGTACGAGT TCAGCCTGAC CCGTGAGACA AAGAAGCAGC TGCTCTTTGG CACTGTGGGG 240
GTGCCTGAGC ACACATACCG CTCCCGAACC AACTTCACCA GCAAAATACAA CATGAAGGTC 300
CTCTACTTAT CCGCCTTCAC TAGCAAGGAC GAGGGCACCT ACACGTGTGC ACTCCACCAC 360
TCTGGCCATT CCCACCCAT CTCTCCCGA AACGTTACAG TGCTCGAG 408

```

(2) INFORMATION FOR SEQ ID NO:528:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 403 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:528:

```

GTAGGTCACA GCAGAAGCAG CCAAATGGA TCCCCAGTGC ACTATGGGAC TGAGTAACAT 60
TCTCTTTGTG ATGGCCTTCC TGCTCTCTGG TGCTGCTCCT CTGAAGATTC AAGCTTATTT 120
CAATGAGACT GCAGACCTGC CATGCCAATT TGCAAACTCT CAAAACCAAA GCCTGAGTGA 180
GCTAGTAGTA TTTTGGCAGG ACCAGGAAAA CTTGGTTCTG AATGAGGTAT ACTTAGGCAA 240
AGAGAAATTT GACAGTGTTT ATTCCAAGTA TATGGGCCGC ACAAGTTTGT ATTCCGACAG 300
TTGGACCCTG AGACTTCACA ATCTTCAGAT CAAGGACAAG GGCTGTATC AATGTATCAT 360
CCATCAGAAA AAGCCACAG GAATGATTCT CATCCACCTC GAG 403

```

(2) INFORMATION FOR SEQ ID NO:529:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 475 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:529:

```

GAATTCCTCT TCTTACCCT CGTCTGCCG GGCACCTTCC TTAGGTTTGG TTTTCATCTAC 60

```

```

AGCTTCTATG TTCTCTTCAG CTTGGCTGCT CTCCCCAGTC TCCGTTGGAG GCTGGGCTGT 120
TGCCTTGGCA GCAGCATCCT CTGCGGCAGG GGTGGTGGCA GCAGCAGCAG TGACAGCAGC 180
AGGCACATCG GCTTGTTTAG GCTCCTCCTT GGCTGGGGCA TCTTCAGCCT TGGAGGACGG 240
CGAGTTATCA GTGGAAGCTT TAGTGGCACT TTCTGTCTCA GCTGAGCCGG CCTTCTCCTC 300
TGAGGATGCA GGAGCCTGGG GGGCTACCTG CTCTGTGGCA GCATCACCTT CCCCTTTT 360
CTCCTCGGAA GGAGTTTCTC CTGCTTTGCC GGGCTCATCA GGCTTGGAGC CAGTGGCTGG 420
GGCTGCTTCG GCAGTAGTGG TGCCTTCTCC CTTCTTCTCC ACCCCATCGC TCGAG 475

```

(2) INFORMATION FOR SEQ ID NO:530:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 525 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:530:

```

GTGCTGGCGG ACATGGACCT CGTGAATCAG CTGGTGGCTG GGGGTCA GTT CCGGGTGGTC 60
AAGGAGCCCC TCGGCTTTGT GAAGGTGCTG CAATGGGTCT TCGCCATCTT CGCCTTTGCC 120
ACATGCGGCA GCTACAGTGG GGAGCTCCAG CTGAGCGTGG ATTGTGCCAA CAAGACCGAG 180
AGTGACCTCA GCATCGAGGT CGAGTTCGAG TACCCCTTCA GGCTGCACCA AGTGTACTTT 240
GATGCACCCA CCTGCGGAGG GGGCACCAAC AAGGTCTTCT TAGTTGGGGA CTACTCCTCG 300
TCAGCCGAAT TCTTTGTGAC CGTGGCCGTG TTTGCCTTCC TCTACTCCAT GGGGGCTCTG 360
GCCACCTACA TCTTCTGCA GAACAAGTAC CGAGAGAATA ACAAGGGGCC CATGCTGGAC 420
TTTCTGGCCA CGGCTGTGTT CGCCTTCATG TGGCTAGTTA GCTCATCGGC ATGGGCCAAG 480
GGGCTGTGAG ATGTGAAGAT GGCCACAGAC CCAGATGAAC TCGAG 525

```

(2) INFORMATION FOR SEQ ID NO:531:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:531:

```

GCAAACAGAC AAGGCTTACA GGTTAGTTCA GGATCTGCGC CTTATCAAGC AAATTGTTTT 60
GCCTATCCAA CCTGCCGTGC CAAACCCATA TACTCTCCTA TCCTCAATAC CTCCCCTCCAC 120
AACCCTCCA TAACCATTA TTCGGTCTG GATCTCAAAC ATGCTTTCTT TGCTATTCCT 180
TTGCATCCTT CATCCAGCC TCTCTTGCT TTCATTGGG CTGGCCCTGA CACCCATCAG 240
CCTCAGCAAC TTACCTGGGC TGTACTGCCA CAAGCCTTCA CGGACAGCCC CCATTACTTC 300
AGTAGCCCTC GAG 313

```

(2) INFORMATION FOR SEQ ID NO:532:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:532:

```

GAGACTATCG CCTATACTTT ATTTGGGTAA ATGGTTTGGT TAAGGTTGTT TGGTGGTAGC      60
TGGTGGGTT GCTGGGGCTC GGTGTTGTGA GTCGCGATGT TCTTCTCCGA GGCCAGAGCC      120
AGGTCGCGGA CGTGGGAAGC CAGTCCCTCG GAACACAGGA AGTGGGTGGA AGTATTTAAA      180
GCATGTGATG AAGATCACAA AGGATATCTC AGCAGAGAGG ACTTTAAAC TGCTGTTGTA      240
ATGCTGTTTG GGTACAAGCC CTCCAAGATA GAAGTGGATT CTGTGATGTC TTCAATAAAT      300
CCAAATACTT CTGGTATATT ACTCGAG                                         327

```

(2) INFORMATION FOR SEQ ID NO:533:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:533:

```

GCCTGCCCC ACCTTACAGG TCTGGGATGT ACCTTTCCAT CTGTTGCTGC TTTCTTCTAT      60
GGGCCCCTGC CCTCACTCTC AAGAACCTCA ACTACTCCGT GCCCGAGGAG CAAGGGGCGG      120
GCACGGTGAT CGGGAACATC GGCAGGGATG CTCGACTGCA GCCTGGGCTT CCGCTGCAG      180
AGCGCGGCGG CGGAGGGCGC AGCAAGTCGG GTAGCTACCG GGTGCTGGAG AACTCCGCAC      240
CGCACCTGCT GGACGTGGAC GCAGACAGCG GGCTCCTCTA CACCAAGCAG CGCATCGACC      300
GCGAGTCCCT GTGCCGCCAC AATGCCAAGT GCCAGCTGTC CCTCGAG                                         347

```

(2) INFORMATION FOR SEQ ID NO:534:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 506 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:534:

```

GGTAGGACCG GCGAGGAATA GGAATCATGG CGGCTGCGCT GTTCGTGCTC CTGGGATTCC      60
CGCTGCTGGG CACCCACGGA GCCTCCGGGG CTGCCGGCAC ATTCTTCACT ACCGTAGAAG      120
ACCTTGGCTC CAAGATACTC CTCACCTGCT CCTTGAATGA CAGCGCCACA GAGGTCACAG      180
GGCACCGCTG GCTGAAGGGG GCGTGGTGC TGAAGGAGGA CGCGTGCCC GGCCAGAAAA      240
CGGAGTTCAA GGTGGACTCC GACGACCACT GGGGAGAGTA CTCCTGCGTC TTCTCCCCG      300
AGCCCATGGG CACGGCCAAC ATCCAGCTCC ACGGGCCTCC CAGAGTGAAG GCTGTGAAGT      360
CGTCAGAACA CATCNACGAG GGGGAGACGG CCATGCTGGT CTGCAAGTCA GAGTCCGTGC      420
CACCTGTCAC TGACTGGGCC TGGTACAAGA TCACTGACTC TGAGGACAAG GCCCTCATGA      480
ACGGCTCCGA GAGCAGAGTT CTCGAG                                         506

```

(2) INFORMATION FOR SEQ ID NO:535:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:535:

```

GAATTCCTCT TCTTTACCCT CGTCCTGCCG GGCACCTTCC TTAGGTTTGG TTTCATCTAC      60
AGCTTCTATG TTCTCTTCAG CTTGGCTGCT CTCCTCAGTC TCCGTTGGAG GCTGGGCTGT      120
TGCCTTGGCA GCAGCATCCT CTGCGGCAGG GGTGGTGGCA GCAGCAGCAG TGACAGCAGC      180
AGGCACATCG GCTTGTTTAG GCTCCTCCTT GGCTGGGGCA TCTTCAGCCT TGGAGGACGG      240
CGAGTTATCA GTGAAGCTT TAGTGGCACT TTCTGTCTCA GCTGAGCCGG CCTTCTCCTC      300
TGAGGATGCA GGAGCCTGGG GGGCTGCCTG CTCTGTGGCA GCATCACCTT CCCCTTCTT      360
CTCCTCGGAA GGAGTTTCTC CTGCTTTGCC GGGCTCATCA GGCTTGGAGC CAGTGGCTGG      420
GGCTGCTTCG GCAGTAGTGG TGCCTTCTCC CTTCTTCTCC ACCCCATCGC TCGAG      475

```

(2) INFORMATION FOR SEQ ID NO:536:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 501 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:536:

```

GAATTCGCCT TCATGGCCTA CAAGCTCTAG CCTAGACCTT TAGTGTGCCA TGCAGTCACA      60
GGTCTGAAAA GCAGCATCAT CCAAACCTTA CTTAATCTCT AAAATCTCAG CTGGTGGACA      120
GCTCATGATT AGTTCAGCCC ACTTCCTCCC CCTTAGTTGA GTTTGCAGCA GGACGCAGGA      180
GATAAGCACT TCCAAGCAAG TCTGATTAT ATATCAAACCT CGGTCTCCAT CCCAGGCCAG      240
CTGACCCTCA GAGCCAGCAA TGCTCTGTGC TTCCTCCCTG CGTCACGGCT TGGCAAGAGC      300
TGCCTCTGCT GAGCAGTGTG TGTGATGGAG ACGGAGGCCG CTGAAGGCCG AGTGCTTGCA      360
GGCTTGTGAA CTGCCATCGA ACACAATCCA AACTCTGGAA ATGTTCTGTA CCACCTAAGC      420
CCTCAACAAC GTAATGCCTG TATGTGCTNT TTNTCAGTAA ACTCCTTGCT CATGTCNATA      480
AAGTATCCCT GAACACTCGA G                                501

```

(2) INFORMATION FOR SEQ ID NO:537:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:537:

```

GCGGGCACCA TTCCAGTAT GTACCAAACC AAAGCCGTCA TCATTGCAAT GATCATCACT      60
GCGGTGGTAT CCATTTCAGT CACCATCTTC TGCTTTCAGA CCAAGGTGGA CTTACCTCG      120
TGCACAGGCC TCTTCTGTGT CCTGGGAATT GTGCTCCTGG TGAAGGGAT TGTCACTAGC      180
ATTGTGCTCT ACTTCCAATA CGTTTACTGG CTCCACATGC TCTATGCTGC TCTGGGGGCC      240
ATTGTGTTCA CCCTGTTCTT GGCTTACGAC ACACAGCTGG TCCCGGGGAA CCTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:538:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:538:

```

GCTCCACCAG CTA CTGAGAA AATGGCCTGT AAAGATCCAG AAAAACCCTAT GGAGGCCTGT      60
GCCTCAGCAC ATGTGCAACC CAAGCCTGCC CCTGAAGCCA GTAGCCTAGA GGAGCCCCAT      120
AGCCCAGAAA CAGGGGAGAA GGTAGTAGCA GGAGAGGTAA ACCCACCCTAA TGGCCCTGTG      180
GGGGACCCAC TGAGCCTCTT GTTTGGGGAT GTGACATCCC TGAAGAGCTT TGATTCATTG      240
ACAGGTTGTG GTGACATAAT AGCAGAACAA CTCGAG                                276

```

(2) INFORMATION FOR SEQ ID NO:539:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:539:

```

GAATTCGGCC TTCATGGCCT AGCCAGACAA CTTGTACTGA TCTTTCTTTG CTTTGCTTAC      60
TAATCACACA CACCTCTCTT TCTAGCCTGT GAAGACTTAA CTGATTTTCT ACGGATGAAG      120
GTTTCAGTGT CCCAAGGCCC CATACCGTAT CTGATTTTAC TTTATTTTGT TTTGTTAAGC      180
CTAACAGCTT CTGAGGAGCC ACGTAGAGCT CAAGAAGCAA AAGCTACTGA GAGTAGATGC      240
TATGTAAACT GCACAAGACG TCTCGAG                                267

```

(2) INFORMATION FOR SEQ ID NO:540:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:540:

```

GAATTCGGCC TTCATGGCCT AAAAAAGAT GCTGGACAAG GCGTTTGCG AGCGGATCAT      60
CCATGACTAC AAGGATATTT TCAAACAAGC AACTGAAGAC AGGCTCACCA GTGCCAAGGA      120
ACTGCCCTAT TTTGAAGGTG ATTCTGGCC CAATGTGTGA GAAGAGAGCA TTAAGGAAGT      180
AGAACAAGAA GAAGAGGAGA GAAAAAGGA AGAGAGCACT GCAGCCAGTG AAACCACTGA      240
GGGCAGTCAG GGCGACAGCA AGAATGCCNA GAAGAAGAAC NACNAGAAAA CCAACAAGAA      300
CAAAAGCAGC ATCAGCCGCG CCAACAAGAA GAAGCCCAGC ATGCCCAACG TGTCCAATGA      360
CCTGTCCCAG AACTCGAG                                379

```

(2) INFORMATION FOR SEQ ID NO:541:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:541:

```

GAAATCGGCC TTCATGGCCT ACATAATTG AATCAACACA ACCACCCACA GCCTAATTAT      60
TAGCATCATC CCTCTACTAT TTTTAAACCA AATCAACAAC AACCTATTTA GCTGCTCCCC      120
AACCTTTTCC TCCGACCCCC TAACACCCCC CCTCCTAATA CTAACACCT GACTCCTACC      180
CCTCACAATC ATGGCAAGCC AACGCCACTT ATCCAGTGAA CCACTATCAC GAAAAAACT      240
CTACCTCTCT ATACTAATCT CCNNACAAAT CTCCTTAATT ATAACATTCA CAGCCACAGA      300
TCTCGAG                                     307

```

(2) INFORMATION FOR SEQ ID NO:542:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:542:

```

GGATGGCGCC GCGGAGGGTC AGGTCGTTTC TGCGCGGGCT CCCGGCGCTG CTAAGTCTGC      60
TGCTCTTCTT CCGGCGCTGG CCCGCTGCGA GCCACGGCGG CAAGTACTCG CCGGAGAAGA      120
ACCAGCCCAA GCCGTCCCCG AAACGCGAGT CCGGAGAGGA GTTCCGCATG GAGAAGTTGA      180
ACCAGCTGTG GGAGAAGGCC CAGCGACTGC ATCTTCCTCC CGTGAGGCTG GCCGAGCTCC      240
ACGCTGATCT GAAGATACAG GAGAGGGACG AACTCGCCTG GAAGAACTA AAGCTTGACG      300
GCTTGGACGA AGATGGGGAG AAGGAAGCGA GACTCATACG CAACACACTC GAG          353

```

(2) INFORMATION FOR SEQ ID NO:543:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:543:

```

GGATACCCTA AAAAAACAAT CTATGTCAGA GGCTTCACTG GAGGTTACGT CACGTTATCG      60
TATTAATTGA GAAGATGAGA CACAGGATTT AAAGAAGAAA TTAGGTCAA TCAGAAATCA      120
ATTGCAAGAA GCACAGGATC GACATACAGA AGCTGTCAGA TGTGCTGAGA AGATGCAAGA      180
TCACAAGCAA AAGCTTGAAA AAGATAATGC CAAGTTAAAA GTTACAGTCA AAAAGCAAAT      240
GGACAAAATT GAGGAGCTTC AGAAAAACCT GTTAAATGCA AATTGTCTG AAGATGAAAA      300
GGAAGTGGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:544:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:544:

```

GTTTGGATGA TTGGTGGCGT GTACGCAGCT GCTATGGCCT GGGCCATCAT CCCCCTATAT      60
GGGTGGAGTT TTCAGATGGG TTCTGCCTAC CAGTTCCACA GCTGGAGGGT CTTGCTCCTC      120

```

GTCTGCGCCT TTCCTTCTGT GTTTGCCATT GGGGCTCTGA CCACGCAGCC TGAGAGCCCC	180
CGTTTCTTCC TAGAGAATGG AAAGCATGAT GAGGCCTGGA TGGTGCTGAA GCAGGTCCAT	240
GATACCAACA TCGAGCCAA AGGACATCCT GAGCGACTCG AG	282

(2) INFORMATION FOR SEQ ID NO:545:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:545:

GAATTCGGCC TTCATGGCCT AGAACTTTGT ACACCATGGA ATGTTCTACT TATTATTTTG	60
TGCTACAATA TGTGCTGTTT CTTTGTITG AATGCAGAT TGTCTACTAT GAAGCAGGGA	120
TTATTCTATG CTGTGCTCTG GGGCTGCTGT TTATTATTCT GATGCCTCTG GTGGGGTATT	180
TCTTTGTAT GTGTCGTTGC TGTAACAAAT GTGGTGGAGA AATGCACCAG CGACAGAAGG	240
AAATGGGGCC CTTCCTGAGG AAATGCTTTG CAATCTCCCT GTTGGTGATT TGTATAATAA	300
TAAGCATTGG CATCTTCTAT GGTTTGTGG CAAATCACCA GGTAAGAACC CGGATCCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:546:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:546:

TCGAGGGACA TGAGGCTGAG CTGGTTCCAG GTCCTGACAG TACTGTCCAT CTGCCTGAGC	60
GCCGTGGCCA CGGCCACGGG GGCCGAGGGC AAAAGGAAGC TGCAGATCGG GGTCAAGAAG	120
CGGGTGGACC ACTGTCCCAT CAAATCGCGC AAAGGGGATG TCCTGCACAT GCACTACACG	180
GGGAAGCTGG AAGATGGGAC AGAGTTTGAC AGCAGCCTGC CCCAGAACCA GCCCTTTGTC	240
TTCTCCCTTG GCACAGGCCA GGTCAATCAAG GGCTGGGACC AGGGGCTGCT GGGGATGTGT	300
GAGGGGGACC TCGAG	315

(2) INFORMATION FOR SEQ ID NO:547:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 449 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:547:

GAATTTAAT TAAGAATTGG GCCTTCATGG CCTAATCGAG GAGAATGGAG ACCAAACCTG	60
TGATAACCTG TCTCAAACCC CTCCTCATCA TCTACTCCTT CGTCTTCTGG ATCACTGGGG	120
TGATCCTGCT GGCTGTTGGA GTCTGGGGCA AACTTACTCT GGGCACCTAT ATCTCCCTTA	180
TTGCCGAGAA CTCCACAAT GTCCTCATG TGCTCATCGG AACTGGCACC ACTATTGTTG	240


```

TCTTTGGCCT GTTTGGATGC TTTGCTACAT GTCGTGGTAG CCCATGGATG CTGAAACTGT      300
ATGCCATGTT TCTGTCCCTG GTGTTCTGG CTGAGCTCST AGCTGGCATT TCAGGGTTTG      360
TGTTCGTCA TGAGATCAAG GACACCTTCC TGAGGACTTA CACGGACGCT ATGCAGACTT      420
ACAATGGCAA TGATGAGAGA ATGCTCGAG                                         449

```

(2) INFORMATION FOR SEQ ID NO:548:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:548:

```

GGGCTTTAAA GGCAGACATT GATGCTACAT TATATGAACA AGTCATCCTG GAAAAAGAAA      60
TGGGAACCTTA TTTGGGCACC TTTGATGATT ACTTGGAGTT ATTCCTGCAG TTTGGTTATG      120
TGAGCCTTTT CTCCTGTGTT TACCCATTAG CAGCTGCCTT TGCTGTGTTA AATAACTTCA      180
CTGAAGTAAA TTCAGATGCC TTAATAATGT GCAGGGTCTT CAAACGTCCA TTCTCAGAAC      240
CTTCAGCCAA TATTGGTGTG TGGCAGTTGG CTTTGAAGAC GATGAGTGT ATATCTGTGG      300
TCACTAAGTG TGGCTGATT GGAATGTCAC CACAAGTCAA TGCAGTCTTT CCAGAATCAA      360
AGGCAGACCT CGAG                                                         374

```

(2) INFORMATION FOR SEQ ID NO:549:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:549:

```

GTACAATCTG AATCCAGGTC TGACAGCTGG CCATACAAAG TCATACTTTC CCCACATCCC      60
TCCTCTTTGA TAGGCATTGT CATCTAGAGC AATAGCCTCG AAATAGACTG AACACCGTGG      120
CCCATAGCTT AACTCGGTT CACCTCTATT TCAAAGTAAA CTGGGGCTGG GATTACAGGC      180
ATGAGTATGT TTTCATTGT ACATAAAGAC TTTATACAAA TGCTCTTCCT AATATTGTCT      240
ACTTATTTTT GCATTAGTTC AAATTCTTTG TCCTGTCTAT CCAAAACTCT CGAG          294

```

(2) INFORMATION FOR SEQ ID NO:550:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:550:

```

GAATTCGGCC TTCATGGCCT AACTGCACG GGAACCCCC GAACCATCAT CGTGCCACCC      60
CTGAAAACCC AGGCCAGCGA AGTATTGGTG GAGTGTGATA GCCTGGTGCC AGTCAACACC      120
AGTCACCACT CGTCCTCCTA CAAGTCCAAG TCCTCCAGCA ACGTGACCTC CACCAGCGGT      180
CACTCTTCAG GGAGCTCATC TGGAGCCATC ACCTACCGGC AGCAGCGGCC GGGCCCCCAC      240

```

TTCCAGCAGC AGCAGCCACT CAATCTCAGC CAGGCTCAGC AGCACATCAC CACGGCCGTC 300
GAG 303

(2) INFORMATION FOR SEQ ID NO:551:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:551:

GCCACAAGCC TGTCAGCAAG TGGGGCTACT TGGGTCCTCG GGCCTCAATC CACTCCTGGC 60
CAGAGACAAC TTCCTCTCCC ATGGGAAAGG CTAACGCATG CCCATAAATT AAGACATTTG 120
CTCTCCCTCC AAGCCCTGGA AACCTGGGAC TCTCTAACAT CTACCTCTGT TTTCTTTGGC 180
TGCATTCAAC TTTCTGCAA TTAGTCAGGC CCTGGGGCAG CAGTTAGACG ACAGATGAGT 240
CAGAGGATTG CAGAATCTAA TCCAGAAGGA AGAGTTTATC CAAATGTTGG TGGCCTTTCT 300
CTTTTGGCGC ATTCTCTTCT GGTCTGTCT TTTCTCAGGA GTCCTCTGAG CTTCCATGTA 360
CCGGGCCCCC TCGAG 375

(2) INFORMATION FOR SEQ ID NO:552:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:552:

GCAAGGGCAG GCGGGTCCCC CAGTCCCGCC ATTACGGGTT GTCAGACCGT CTGCGTGTGG 60
CAGGGCTCCC AAGGGCAGGC GGGTCCCCCA GTCCCGCCAT TACGGGTTGT CAGACCGTCT 120
GCGTGTGGCA TTTTGTGGCT TATAAGCTTC ACCCACTCAC CCCCAACCCA CACCCACAT 180
CCCCCTGCCG GCAGCCCCTC AACCTAAGAA GGCCAGAGCA TATTATTTT CGGAGGGAGC 240
AGATTACTTC TCCCAGAGAA AGGAAAATCT TGGAAAAGAT TAAAAACAC AAATCTAAGC 300
CTTGACGGTT TTTTTCCTCC TTTTGACCCC CTTCCCATTT TTTAGNATT TATTCCTATG 360
GCTTTTTTTT TTCTGTGCG TGTCTCGAG 390

(2) INFORMATION FOR SEQ ID NO:553:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 620 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:553:

GAATTCGGCC AAAGAGGCCT AAGCAGGCGC GAGGCGGCGG CAGCGAGCCG GGTCCCACCA 60
TGGCCGCGAA TTATTCCAGT ACCAGTACCC GGAGAGAACA TGTCAAAGTT AAAACCCAGT 120
CCCAGCCAGG CTTCTGGAA CGGCTGAGCG AGACCTCGGG TGGGATGTTT GTGGGGCTCA 180
TGGCCTTCCT GCTCTCCTTC TACCTAATTT TCACCAATGA GGGCCGCGCA TTGAAGACGG 240

```

CAACCTCATT GGCTGAGGGG CTCTCGCTTG TGGTGTCTCC CGACAGCATC CACAGTGTGG      300
CTCCGGAGAA TGAAGGAAGC TGGTGACAT CATTGGCGCC TTACGGACAT CCAAGCTTTT      360
GTCTGATCCA AACTATGGGG TCCATCTTCC GGCTGTGAAA CTGCGGAGGC ACGTGGAGAT      420
GTACCAATGC GTAGAACTG AGGAGTCCAG GGAGTACACC GAGGATGGGC AGGTGAAGAA      480
GGAGACGAGG TATTCCTACA ACACTGAATG GAGGTCAGAA ATCATCAACA GCAAAAACCTT      540
CGACCGAGAG ATTGGACACA AAAACCCAG TGCCATGGCA GTGGAGTCAT TCATGGCAAC      600
AGCCCCCTTT GTTCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:554:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 600 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:554:

```

GAATTCGGCC AAAGAGGCCT AGGACTTGTT TCGGAAGGAG CTGACTGGCC AATCACAATT      60
GCGAAGATGA AGGCTCTGTG GGCCGTGCTG TTGGTCACAT TGCTGACAGG ATGCCTAGCC      120
GAGGGAGAGC CGGAGGTGAC AGATCAGCTC GAGTGGCAAA GCAACCAACC CTGGGAGCAG      180
GCCCTGAACC GCTTCTGGGA TTACCTGCGC TGGGTGCAGA CGCTGTCTGA CCAGGTCCAG      240
GAAGAGCTGC AGAGCTCCCA AGTCACACAA GAACTGACGG CACTGATGGA GGACACTATG      300
ACGGAAGTAA AGGCTTACAA AAAGGAGCTG GAGGAACAGC TGGGTCCAGT GGCAGGAGGAG      360
ACACGGGCCA GGCTGGGCAA AGAGGTGAGC GCGGCACAGG CCCGACTCGG AGCCGACATG      420
GAGGATCTAC GCAACCGACT CCGGCAGTAC CGCAACGAGG TGCAACCCAT GCTGGGCCAG      480
AGCACAGAGG AGATACGGGC GCGSCTCTCC ACACACCTGC GCAAGATGCG CAAGCGCTTG      540
ATGCGGGATG CCGAGGATCT GCAGAAGCGC CTAGCTGTGT ACAAGGCAGG GGCAGTCGAG      600

```

(2) INFORMATION FOR SEQ ID NO:555:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:555:

```

GAATTCGGCC TTCATGGCCT AGTATTTCTT TATCACAGAT TTTGGGAGCA ACAGTGTGTT      60
CCCATCTGGA GGAGGCTGAG TTAATTCGTG GGAACACCCA TTTGGTTGGA AATAAAAACA      120
CAGCATGGAT TTAATTCATG CCACCTATTT ATTTTATTA GGACTTGAGC TTCTTTGTAT      180
TTTTTTTGCT TTGCTTCCAC TCAAAACCAG ATTTGGTGGT TGCTGTGTAA ACAGTGAAAT      240
ACAACACAGG CCAGGACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:556:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:556:

GAATTCGGCC	AAGAGGCCTA	GTATTCTTTC	GTTTCTCTCT	AAAAGAAGAA	AAATATAATT	60
TAGAAATACA	TTGCGTATTT	TCTAAAACAA	TAAATTTATA	GTGTTAATAT	TCATAGGGTC	120
AATCAAAATG	AAGCTTCTCC	TTGGGCCTG	CATTGTATGT	GTTGCTTTTG	CAAGGAAGAG	180
ACGGTTCCCC	TTCATTGGTG	AGGATGACAA	TGACGATGGT	CACCCACTTC	ATCCATCTCT	240
GAATATTCCT	TATGGCATA	GGAATTACC	ACCTCCTCTT	TATTATCGCC	CAGTGAATAC	300
AGTCCCCAGT	TACCCCTGGGA	ATACTTACAC	TGACACAGGG	TTACCTTCGT	ATCCCTGGAT	360
TCTAACTTCT	CCTGGATTCC	CCTATGTCTA	TCACATCCGT	GGTTTCCCT	TAGCTACTCA	420
GTTGAATGTT	CCTCCTCTCC	CTCCTAGGGG	TTTCCCGTTT	GTCCCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:557:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:557:

GAATTCGGCC	AAAGAGGCCT	ATGCAGATTC	TGTGGTTATA	CTCACTCCTC	ATCCCAAAGA	60
ATGAAATTTA	CCACTCTCCT	CTTCTGGCA	GCTGTAGCAG	GGGCCCTGGT	CTATGCTGAA	120
GATGCCTCCT	CTGACTCGAC	GGGTGCTGAT	CCTGCCCAGG	AAGCTGGGAC	CTCTAAGCCT	180
AATGAAGAGA	TCTCAGTGCC	AGCAGAACCA	GCTTCACCCC	CAGAGACAAC	CACACAGGCC	240
CAGGAGAGTT	CGGCGGCAGC	AGTTCAGGGG	ACAGCCAAGG	TCACGTCAAG	CAGGCAGGAA	300
CTAAACCCCC	TGAAATCCAT	AGTGGAGAAA	AGTATCTTAC	TAACAGAACA	AGCCCTTGCA	360
AAAGCAGGAA	AAGGAATGCA	CGGAGGCGTG	CCAGGTGGAA	AACAATTCAT	CGAAAATGGA	420
AGTTCCTCG	AG					432

(2) INFORMATION FOR SEQ ID NO:558:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 104 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:558:

GAATTCGGCC	AAAGAGGCCT	AAAAAGTATA	TACATTTTAG	TACTGCTTTG	ATTTTGTTTA	60
CATACTGAAA	AATGTATCTG	AAAATGAGTT	ATTTTGGACT	CGAG		104

(2) INFORMATION FOR SEQ ID NO:559:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 203 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:559:

GAATTCGGCC	AAAGAGGCCT	ATTCACCTCA	GCTTCACTGA	CTTCTGGATT	CTCCTCTTGA	60
------------	------------	------------	------------	------------	------------	----

GTAAAAGGAC TCAGCCAACT ATGAAGTTTT TTGTTTTTGC TTAAATCTTG GCTCTCATGC 120
 TTTCCATGAC TGGAGCTGAT TCACATGCAA AGAGACATCA TGGGTATAAA AGAAAATTC 180
 ATGAAAAGCA ACATGATCTC GAG 203

(2) INFORMATION FOR SEQ ID NO:560:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:560:

GAATTCGGCC ACAGAGGCCT AGCCAGTCT CGGGTATGTC TTTATCAGCA GCATGAAAAT 60
 GGACTAATAC AGTTGCTATG ATTATTAGTT TTTTGCTACT GAGTTGTAGG AGTATCTGAT 120
 ATATATTTTG GTAAC TAATC CCTTATAAAA TATATTGTTT CCAAAATATT TTTTCCCAT 180
 CCATAGGCTG CCTTTTCATT CTGTTGTTTC CTTTGCTTCA GGTAAAGGAT TCTGAAACAA 240
 CTATTGGGC AGCAGAACAG CTTCTTTTGT TTGCTTTCTC ATTGTCTACT GTGTTCTGCA 300
 TAAATAAGGT TATGAATTAG CTGTTGTTCA TATGGGTGAA AGATTTCAT CTGTGGACGC 360
 TTAGATAGCA CATATGGTAA ACCATAGAAC TTCACCATT ATAACCTTG AACAACTGAT 420
 ACACTTAGAA AAGCAGTTT TGGCTGGCG CGGTGGCTCA TGCCTGTAAT CCCTAGGCCT 480
 CGAG 484

(2) INFORMATION FOR SEQ ID NO:561:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 176 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:561:

GAATTCGGCC AAAGAGGCCT ATTGAATTCT AGACCTGCCT CGAGCTGACA ACTATGAAGT 60
 TTTTGTGTTT TGCTTTAATC TTGGCTCTCA TGCTTTCCAT GACTGGAGCT GATTCACAT 120
 CAAAGAGACA TCATGGGTAT AAAAGAAAAT TCCATGAAAA GCATCAAGGA CTCGAG 176

(2) INFORMATION FOR SEQ ID NO:562:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:562:

GAATTCGGCC AAAGGGCCTA ATTTTATTAA TAACATTTTA AAAACAACAA TTATGAAAAA 60
 GCAATTCGGT TTACCGCTGA TGCTTGCGTC AGCCCTCGCC TTCTCTGCTT GTAGCTCTGA 120
 TGATGTGGCC GAGAATGGCC CAAAGGACAT CGCAGCTCTT ACAGATGGTG GTTACTTGAA 180
 GATGTCTATC AATCTTCCTT CCCGTGCTGC TAATGGTGGC TTCAGAGCTA CGGAACAAGA 240
 CGGTTATGTT AACTTGGAAG ATGGATTGGC AAAAGAGTAC AATGTAAAGG ATGCTATCCT 300

CGTCCTTTTC CAAGGTGATA ATGAAGCAGA TGCCAAGTTC CATTCTGCAT ATGAACCTAC 360
TACATCAATG CAGAAGGATG GCTCTACGCA AATCACTTCC ACAACGAAAC TTGTAAAGAA 420
TGTGAATATT GGTGGTCAGG GAAATCCTCT TAAACCTGCT GATGTTAAGC TCGAG 475

(2) INFORMATION FOR SEQ ID NO:563:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 204 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:563:

GAATTCGGCC AAAGAGGCCT ACAATTATGG GGCTTATGGG GAACATGCTC ATTGTGTTTT 60
ACCAATCAGG ACATGGAAC TAAACAATAT TTGTGACTT ATAGTGAAAC CTGGCTAATT 120
AGGACTCTTA ACCAGCACTC TTAATTAAC TACTTATTTT TCTCTGTGTC CACCCCTCTT 180
AAAGAAAAAG AAGCGAACT CGAG 204

(2) INFORMATION FOR SEQ ID NO:564:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 102 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:564:

GAATTCGGCC AAAGAGGCCT ATAGGCCTCT TTGGCCGTAG GCCTCTTTGG CCGATTGAAT 60
TCTAGACGCG GCTCGAGGCA GGTCTAGGCC TCTTTGGCCG AA 102

(2) INFORMATION FOR SEQ ID NO:565:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:565:

GAATTCGGCC AAAGAGGCCT ACTCAATTGT TCCTTTCTTC CATCACCACC CTTTGAAGGT 60
CTCTTTGCCT ACTGTAGAT TTAGGGGGAC ATAACATTGA GACTGAGCAG TTCTTTGAAC 120
CTCTCCTCTC AGCAGCCACC AGCCTGGCTT TCGCAGACCA CTGGAAAGTA TCCCAGCTCA 180
TTAGCTTTTG GAATGACGGG AAGCCTTTTG ATGTTNGACG TCTTAATCTC AACTCTTCAA 240
CTTAGCTCAT TCTGGAGCAG TCACGCGATG ACAGATGAGC TCGAG 285

(2) INFORMATION FOR SEQ ID NO:566:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:566:

GATAACTTGA	GATCAATCA	GTCAATTTG	ACTCTTCTCT	TTTCACTCC	TTTATATCT	60
GATCAGTCAG	CAGTTTTTTG	AAACCCTGTT	CGAAGCAGTT	CTCAACACTT	GTGCACCCAT	120
TCTTTCTCCT	ACACCACTCA	ATCTAGACCC	TCACATGTGG	CTGTCCTGCT	TTCCTTCTCT	180
CCTACTTCTA	AGCTATTCTG	TGGAGAGATG	TCAAAGTAAT	CTTCACAAAA	AATCTGATTG	240
CATCACTTCA	CATCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:567:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 374 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:567:

GGGCTTTAAA	GGCAGACATT	GATGCTACAT	TATATGAACA	AGTCATCCTG	GAAAAAGAAA	60
TGGGAACCTA	TTTGGGCACC	TTTGATGATT	ACTTGGAGTT	ATTCTGCAG	TTTGGTTATG	120
TGAGCCTTTT	CTCCTGTGTT	TACCCATTAG	CAGCTGCCTT	TGCTGTGTTA	AATAACTTCA	180
CTGAAGTAAA	TTCAGATGCC	TTAAAAATGT	GCAGGGTCTT	CAAAAGTCCA	TTCTCAGAAC	240
CTTCAGCCAA	TATTGGTGTG	TGGCAGTTGG	CTTTTGAAAC	GATGAGTGTT	ATATCTGTGG	300
TCACTAACTG	TGCGCTGATT	GGAATGTCAC	CACAAGTGAA	TGCAGTCTTT	CCAGAATCAA	360
AGGCAGACCT	CGAG					374

(2) INFORMATION FOR SEQ ID NO:568:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:568:

GAATTCGGCC	TTCATGGCCT	AGATAAGTAA	ATAGACTTAC	AGAGGGAAAG	TAACTTGGCT	60
AAGGTGAACT	TGAACCAAGA	TGACTGACTC	CAGAGCTTCC	ATTTTCTTTT	TTCTTTCTTT	120
TTTTTTTTTT	NGGAGACAGA	GTCTCACTCT	GTGCGCCAGG	CTGGAGTGCA	ACGGCGCGGT	180
CTCCACTCAC	TGCAGCCTCC	AGCTCCTGGG	CTCAAGTGAT	CCTCCCACTT	CAGCACCCCC	240
ACGTCTCGAG						250

(2) INFORMATION FOR SEQ ID NO:569:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 367 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:569:

```
GAATTCGGCC TTCATGGCCT ACAGGGAGGG AGGGGTTCTG AGAGCCTCAG ACCACAGGGC   60
CTGAGGCCCA CAGTGGCCCA GAGTCCATCT GGCAGCCCCT GCTCTGCTGG CCCAGGGGGC   120
TCTCCCCAGG GTGGAGTAGG CAGGGGAGGG TCGCTGGTCC CCAGTCCCAG CCTTCGAGAG   180
GTGGGGCCAG ACAGCAGGGC ACCCGTACCC GAGACCACAG TGCTCCCCAA GGCCAGCTCT   240
CTCCCCAGTG AGGTCACTCC TACCTCCGGG GCCATTGGGG GCGGGGGATC CTGTAGATCT   300
CTGACTCTGC GCGGCCTTAT CTGATGGCC TGGCNCAAGA AGGGAGGGGC CTGCCCACTT   360
CCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:570:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:570:

```
TTTTGACTGA CTCTTAAAT TAGTACAATT TTTCTACTTG TCATATAACT CCTGGAACAA   60
TAGTACGGGA AGCCGTGATC CTTTCCCTG ACTCATGATT TTAGTCTTTT TCCAAATCGC   120
TGTTTTTTTT TGGTTTTTTT TTTTITGCT GCTCCAACGA CCAGCATGTG TTGGAGCAGA   180
TCTCCATGGT AAGCCAAAAG TGGACTTGTC AGCCTATAAC TACTCTGCAG CTGCCACTAA   240
CTCTACAGGC ACAGAGCTCG AG
```

(2) INFORMATION FOR SEQ ID NO:571:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:571:

```
CAGAACTCT TGGACTCAA AGAGAAAGAA AAAAGTCAAG CCAAGGAAAG CACAAGAGGT   60
AAGACAGGCC TAGTGATCTC AGCAGGCAGA ATTTATGGAC ATATTTTGCA GGCAAGTGGT   120
TCTCAATCAG GGGTGATTTT TGGCTTGTA GGACATTTAG CAATATCTGG ACACATTTT   180
TGGTTGTCGT AAGTGGATGG GGGTTGCTGC TATCATCCTA CAATGCATAG GTGCATTAGT   240
CTGTTTTCAT GCTGCTGATA AAGACATACC GGAGACTGGG CAATTTGCAA ATGAGAGATG   300
GCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:572:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 578 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:572:

```

GAATTCGGCC TTCATGCCTA CAGCCATATT AAAACTAAGT AAACCTCGTCC CTGGGAACTA      60
CACTTTTCAGC TTGACTGTAG TAGACTCTGA TGGAGCTACC AACTCTACTA CTGCAAACCT      120
GACAGTGAAC AAAGCTGTGG ATTACCCCCC TGTGGCCAAC GCAGGCCCCA ACCAAGTGAT      180
CACCTTGCCC CAAACTCCA TCACCCTCTT TGGGAACCAAG AGCACTGATG ATCATGGCAT      240
CACCAGCTAT GAGTGGTCAC TCAGCCCAAG CAGCAAAGGG AAAGTGGTGG AGATGCAGGN      300
TGTTAGAACA CCAACCTTAC AGCTCTCTGC GATGCAAGAA GGAGACTACA CTTACCAGCT      360
CACAGTGACT GACACAATAG GACAGCAGGC CACTGCTCAA GTGACTGTTA TTGTGCAACC      420
TGAAAACAAAT AAGCCTCATC AGGCAGATGC AGGCCAGAT AAAGAGCTGA CCTTCTCTGT      480
GGATAGCACA ACCCTGGATG GCAGCAAGAG CTCAGATGAT CAGAAAATTA TCTCATATCT      540
CTGGGAAAAA CACAGGGACC TGATGGGTGC AGCTCGAG      578

```

(2) INFORMATION FOR SEQ ID NO:573:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 623 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:573:

```

GAATTCGGCC TTCATGCCTT AACTTTGTGT GATCAGAGTT TATGGGTGG GCTGCCCCAG      60
GCTTGATAA CTTAAAGGCT TGATGAGGTC ATCAATTAT GCTTGGCTAC CCATGGCACA      120
GAAGCATAGC CCCACTGTGA TGGCTGGGGT GGCTCCGGGC ATCCTGGGCA GTCAGGAGGA      180
AACTCCATGA AGGAAGGAGC TAACCTTTCT GGGGTACCC CTATCCCAGC ACAGACTTCC      240
TCATCTCATT GGTCAAACT GGGTCACATG AACATGCCTC AGCCTATCAC AGGCACAGGG      300
AATGAGACCA TCATGGACCA ATCAGGATTC ACCACTCAAG GTGGGGCCTG CCATCCGGAT      360
GGATGCTCTC CGCCACAGGG AGGTGGGGGA CCCAGAAGCT GTGGGCAATG GCCATGTGCA      420
CAGTAGGACT GAGGCACTCA GTCCCGTAGC TGACCTACCT GGGACAGGCC TGGAGGCTGA      480
CTTAGGTGTG AGGGGCAGAG AGATTACTGT GCACAGACCG CTGTGTGACC CCAGATCTAG      540
GTGGGATCCC GGTGTGCCCC ATCTGCCTGG CTTACCCCAA CCCCTCTGGA ACCTGAACCA      600
TTGAATTCTA GACCTGCCTC GAG      623

```

(2) INFORMATION FOR SEQ ID NO:574:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:574:

```

GAATTCGGCC TTCATGCCTT ACTCCAGAAT GAAGATCTTC TTGCCAGTGC TGCTGGCTGC      60
CCTTCTGGGT GTGGAGCAG CCAGCTCGCT GATGTGCTTC TCCTGCTTGA ACCAGAAGAG      120
CAATCTGTAC TGCCTGAAGC CGACCATCTG CTCCGACCAG GACAACCTACT GCGTGACTGT      180
GTCTGCTAGT GCCGGCATTG GGAATCTCGT GACATTTGGC CACAGCCTGA GCAAGACCTG      240
TTCCCCGGCC TGCCCCATCC CAGAAGGCCT GCTCGAG      277

```

(2) INFORMATION FOR SEQ ID NO:575:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:575:

```
GAATTCGGCC TTCATGGCCT AAGCTTTTGC TTTTAAATA ACTGTATAG CTAAAACTT      60
GACGGTGAAA AGCTCTCAGA TCAAAGCTGA TCCTTCTGTC AGTAATGATT CTAAAAATAA    120
GCAAGATTTT AATGGGGAAT ATATTTTATT TCATTCTTAT CTCAAACCTA GGTACTGTGG    180
TCGTTTGTAG TTCATTTCGA GGCATTTTCA ATGTGCCTCA GGCCACATCC AACCTCTCCC    240
CAGAACTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:576:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 261 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:576:

```
GAATTCGGCC TTCATGGCCT ACAGTCTAAG ACATTTCCTA TTCTGCCTTC TTGTCTTCCT      60
CCCTCTCTTC CACATTGGTC AGACTTACAT CTTGGACAGC TCTCCAGCC ATCTTCTACT    120
GCCTCCCTAT TTTCCCTCC CAGACTTTTC CCCGCAAAAC ATCTGTTGCA GGTGGTATTA    180
ATTCCTATC ACGGCTGTGA CAAATTACCA CAAACTCAGT GGCTTAAAC AATGCACATT     240
TATTATCTGA CAGTTCTCGA G                                     261
```

(2) INFORMATION FOR SEQ ID NO:577:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 216 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:577:

```
GAATTCGGCT TCATGGCCTA GCAAGACTCC ATCTCAAAA AAGAAAGAAA GAAAAAGAA      60
AGTACAAGTT TATAAGTAT TATAGTAAA AATTCGCATT CTGGCTGATT TTAAGCCATT    120
TAAAATTTAT ATAAACAAC CTTCATAAA AATTTGACAG GTGCCAGAT GTTGCTTTCT     180
CCATTATTT TTTGTTTTT TTAATCACA CTCGAG                                     216
```

(2) INFORMATION FOR SEQ ID NO:578:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 294 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:578:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTAA GTGCCGAAAA CTTCAGTGTG CTCATCAAGA      60
ACAAATATCGA CTTCCCGGGC CACAACCTACA CCACGAGAAA CATCCTGCCA GGTTTAAACA      120
TCACTGTGAC CTTCCACAAG ACTCAGAATC CACAGTGTCC CATTTCCGA CTAGGAGACA      180
TCTTCCGAGA AACAGGCGAT AATTTTCAG ATGTGGCAAT TCAGGTGGT GGTGCTTTGT      240
ACACTGGGAT GTGGGGCTGT GTGTCTAGGG ATGAGGATG TCAACAACCT CGAG      294

```

(2) INFORMATION FOR SEQ ID NO:579:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:579:

```

GAATTCGGCC TTCATGGCCT ACCTTCACAG AAAAATGCAT AGCTGGATGC TGCAGACTCT      60
AGCGTTTGCT GTAACATCTC TCGTCCTTTC GTGTGCAGAA ACCATCGATT ATTATGGGGA      120
AATCTGTGAC AATGCATGTC CTTGTGAGGA AAAGGACGGC ATTTTAACTG TGAGCTGTGA      180
AAACCGGGGG ATCATCAGTC TCTCTGAAAT TAGCCCCCCC GATCTCGAG      229

```

(2) INFORMATION FOR SEQ ID NO:580:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 205 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:580:

```

GAATTCGGCC TTCATGGCCT AGCTTACTTT ACAATTCTGC TGTTTGTCAA GTGTTCTTAT      60
AGTTTTTTTT AAAGGTATGT TAACTATTTT TCCCTTTTGG TTTATATTTG TAGGAATCTT      120
TGCCTTTAAG TGTGCCCGTG CAGAAGAATT ATTTAACATG TTGCAAGAGA TTATGCAAAA      180
TAATAGTATA AATGTGGAGC TCGAG      205

```

(2) INFORMATION FOR SEQ ID NO:581:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 200 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:581:

```

GAAGTGTAAT GTCAGACACA CAAGAAAAGC AAATCAGTGT TGTAAGCTTA AAGTACAATT      60
TCAAAGGTCA TTACCAACAG CAGGGTTTTT TTTATACTTT AAAACATTA TGCTACATAT      120
CATTGCCATT TTCATATTTT GGGGTTTTGC TACTCTTATA CAATGGAATC AATGGAAATG      180
TCATCCAGCC AGATCTCGAG      200

```

(2) INFORMATION FOR SEQ ID NO:582:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:582:

```

GAATTCGGCC TTCATGGCCT ACACAAATGT TTGTTGAGTG CTCATTGTAT GTCTGGAGAC      60
CATTCTGTCT TCTTCCCTAA GAGTGTTCAT GCTGTTGGAC CAGGTGTTAT GATTTGCTC      120
TGGAGAATAA GGTATTTCCA CATGGAGCAT GTGGAAAATA TAGTGCCTAT CTCCTGAAAG      180
GTCCAGGTGA TGCAAAGATG AATGAGACAT GATTGGAGGT TTTTCTTCTG TCTGAAATGC      240
AGACAGTTCT GGGTTGGGCA GCTCTGTAAG ATGCTGAACA TGTGTCCTTC CAAGAAGCAA      300
GGATCAGAAA GCAGACTC^A G                                     321

```

(2) INFORMATION FOR SEQ ID NO:583:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:583:

```

GAATTCGGCC TTCATGGCCT ACACCATTGA CTCTTCTAC CGGCCGCATA CCATCACCCT      60
GCTCAGGTTT ACCATCGTCA GCCTCATGTA CTTCGCCTTT ACCAGGGATG ACTCTGTTCC      120
AGAAGACAAC ATCTGGAGAG GCATCCTCTC TGTATTTTTC TTCTTTCTTA TCATCAGTGT      180
GTTAGCTTTC CCAATGGTC CGTTCACGCG ACCTCATCCA GCCTTATGGC GAATGGTTTT      240
TGGACTCAGT GTGCTCTACT TCCTGTTTCT GGTATTCTTA CTCTTCCTGA ATTTCGAGCA      300
GGTTAAATCT CTAATGTATT GGCTAGATCC AAATCTTCGA TACGGCCACC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:584:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 374 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:584:

```

GGAAACTTCT AGAAATAATG ACAAGGATTC AAACCTTATTG TCAATGAGT CCAATGTCAG      60
ATTTTGGAAC TCAACCCATG GAACAATGGG CCATTCAAAT GGAAAAAAA GCTGCAAAAG      120
AAGGAAATCG CAAAGAACGT GTTTGTGAG AACATTTGAG GAAGTACAAT GAGGCCCTAC      180
AAATTAATGA CACAATTCGA ATGATAGATG CGTATACTCA TCTTGAACT TTCTATAATG      240
AAGAGAAAGA TAAGAAGTTT GCAGTCATAG AAGATGATAG TGATGAGGGT GGTGATGATG      300
AGTATTGTGA TGGTGATGAA GATGAGGATG ATTTAAAGAA ACCTTTGAAA CTGGATGAAA      360
CAGATAGACT CGAG                                           374

```

(2) INFORMATION FOR SEQ ID NO:585:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:585:

```

GAATTCGGCC TTCATGGCCT AGAGAACTG AGAGGAAGTT AAAGATTGT CTTACAAAGG      60
CTGTGTAGTG ATAAGACCTA AGGTTTCTC TGAGATTCAA AATGGGTATT ATTGTTCTT      120
TAATCCTTCT GATTATTCTT TTGGAAAAA GGAAGTAGA GGAAAGGAAG TAGAAAAATA      180
ATATTCTTA TACTATTAT GTACCAGACA TGGTGCTAAG TTCATTAAA AACTGCCTC      240
ATTTAATCTT TGCAACCAAT TTATACCCAT ACACATAAGG CCACAAAAGC TCGAG      295

```

(2) INFORMATION FOR SEQ ID NO:586:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:586:

```

GAATTCGGCC TTCATGCCTA AGGTAAGGGA AAGTGAGAAG CAGCAGGATA GTCAGCCTGA      60
AGAAGTTATG GATGTGCTAG AGATGGTTGA GAATGTCAA CATGTAATTG CTGACCAGGA      120
GGTAATGGAA ACTAATCGAG TTGAAAGTGT AGAACCTTCA GAAATGAAG CTAGCAAAGA      180
ATTGGAACCA GAAATGGAAT TTGAAATTGA GCCAGATAAA GAATGTAAAT CCCTTTCTCC      240
TGGGAAAGAG AATGTCAGTG CTTTAGACAT GGAAAAGGAG TCTGAGGAAA AAGAAGAAAA      300
AGAATCTGAG CCCCAACCAC TCGAG      325

```

(2) INFORMATION FOR SEQ ID NO:587:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:587:

```

GAATTCGGCC TTCATGGCCT ACAAGGACGT TAAAGGCATT TTATTCCAGC GTCTCTAGA      60
GAGCTTAGTG TATACAGATG AGGGTGTCG CTGCTGCTTT CCTTCGGAAT CCAGTGCTTC      120
CACAGAGATT AGCCTGTAGC TTATATTGA CATTCTTCAC TGTCTGTTGT ATACCTACCG      180
TAGCTTTTTA CCGTTCACTT CCCCTTCCAA CTATGTCCAG ATGTGCAGGC TCCTCCTCTC      240
TGGACTTTCT CCAAGGCAC TGGACCCTCG AG      272

```

(2) INFORMATION FOR SEQ ID NO:588:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:588:

GAATTCGGCC TTCATGGCCT AGCATCCCTG AAACGTGTGA ATTTTGAGGA TCCTTCTGGT	60
CTTAAAGCCA ATTTAGAAGG TGCTAATCTG AAAGGTGTGG ATATGGAAGG AAGTCAGATG	120
ACAGGAATTA ACCTGAGAGT GGCTACCTTA AAAAATGCAA AGTTGAAGAA CTGTAACCTC	180
AGAGGAGCAA CTCTGGCAGG AACTGATTGA GAGAATTGTG ATCTGTCTGG GTGTAGCTC	240
GAG	243

(2) INFORMATION FOR SEQ ID NO:589:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:589:

GAATTCGGCC TTCATGGCCT AAATTATACT CCAAATGTTT TATCTAAAT GCATTTTCTG	60
TCTTTTCCTT TTACTCTTG TCCTCACTTT TAATGATCCA TCGGCTGACA GTGTCTTTAC	120
ATCCAAAATG CAAAGCAGAC AAATGGGCAT ATCAGGGAAG AACATGACAA AAAGCACCAG	180
CATCAGTGA GACATGTGCT CACTGGAGAA GAATGATGGC AGCCACTCTG AACTGTCAGT	240
GGGCACCTTG GGCACCACTG GCAAAAAGCG GCGCTCTAGC CTTGGTGCCA AAATGGTAGC	300
TATCGTTGGT CTGTACGGA AAAGTCGCAG TGCTTCTCAG CTCAGCGGAC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:590:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:590:

GAATTCAAAT GCTTCAGGTA AATGTTGAAG CTCGGTGATC CGCGGGACAA ATCCTGAGTC	60
ACCCCTGGGT GTCAGATGAT GCCTCCAGG AGAATAACAT GCAAGCTGAG GTGACAGGTA	120
AACTAAAACA GCACTTTAAT AATGCGCTCC CCAACAGAA CAGCACTACC ACCGGGCTCT	180
CCGTATCAT GAACACGGCT CTAGATAAGG AGGGGCAGAT TTTCTGCAGC AAGCACTGTC	240
AAGACAGCGG CAGGCCTGGG ATGGAGCCCA TCTCTCCAGT TCCTCCCTCA GTGGAGGAGA	300
TCCCTGTGCC TGGGAAGCA GTCCCGGCC CCACCCCTCC GGAATCTCCC ACCCGCTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:591:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:591:

GAATTCGGCC TTCATGGCCT ACTCAGTCTG CACAACCTTT TTGCTGTGTG TCGGAATATG	60
TATAACTGGC TACTGCAGAA TCCCAAAAT GTCTGTGTTG TCCACTGCTT GGATGGACGG	120
GCGGCATCAT CAATTCTGGT TGGTGCTATG TTCATTTTCT GTAATCTCTA CTCTACTCCT	180
GGCCAGCCA TTCGATTGCT ATATGCAAAG CGACCAGGAA TTGGACTTTC ACCATCCCAT	240
AGGAGATACC TGGGCTATAT GTGTGACCTA CTGGCAGACA AGCCCTACCG CCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:592:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:592:

GAATTCGGCC TTCATGGCCT ACCGTAAGCA GATGAAGCTG CTGCTGCTGC TGCTGTGCT	60
GAGCTGCGCC GCGTGGCTCA CCTACGTGCA CCTGGGCCTG GTGCGCCAGG GACGCGCGCT	120
GCGCCAGCGC CTGGGCTACG GCGGAGATGG TGAGAAGCTG ACCAGTGAGA CCGACGGCCG	180
GGGGGTCCAC GCTGCGCCAT CCACACAGAG GGCTGAGGAC TCCAGTGAGA GCCGTGAAGA	240
GGAGACCAGC GCAGACATGC TCGGCCAGA TCCCAGGGAT TACCTCGAG	289

(2) INFORMATION FOR SEQ ID NO:593:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:593:

GAGAGATGGT GACTGAGGCA GAAGCTAATA GGGAAGATGA TAGGAAAGAA ATTTTACCCA	60
AGGAATTAGA TTTAGCAAGA GAGCGAAGGA AAGCTGAGAG GCCAAAAACA TCTCTGAGGA	120
AACTGACTC TGAGAGAGAA GAGGTGACAA GGGCAAATGC ACTCAAGGAT GAAGATGCTT	180
TTAAGAAGA GCAAAACTT AAAGCGGAAG AAGGGGAAAC AGAGACAGAA GTAAGAGCTG	240
AGGAAGAGAC AAAAGCTCCC CCAATGAAA TGGGATCTGA TGCTGAGAAC GAAACACTCG	300
AG	302

(2) INFORMATION FOR SEQ ID NO:594:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:594:

GAATTCGGCC	TTCATGGCCT	AGGATATTTA	AACCTCTATT	ATTTTAGACA	AGACTGTCTA	60
GAACCTAAGT	TTGATCTGTC	AGCCAGTACT	CCCATTAAAT	TCAGTGTAGT	TTCACTTGAT	120
AGAATCAGAT	ATGTTATCGA	AATGTTAGCA	GCAGCTTCAT	CCTCCTTCTG	ATTAAAGTAA	180
GTAGAAATGG	GATGTTTTGT	TTAATAACAG	CCATAGTGTG	TGTTTAGACC	ACAGCGGATG	240
TTGTAGACCA	GGACCCTCGA	G				261

(2) INFORMATION FOR SEQ ID NO:595:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 370 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:595:

GAATTCGGCC	TTCATGGCCT	AGGGGCTTTT	GTCAAGATAG	AAGGGTATCA	ACGGTTTCTG	60
TACAGCACAG	ATTATGACAG	CGTCTTTCTT	AAGACTTATC	ATTTGGAGCA	CTGGCTCAGG	120
AGTCGAAATC	ACCAATGGCT	CATCCATCAA	TCAACCAGAA	GTGAAGACGA	AAGCTTCAAA	180
GAAAGAGAATG	TTTAAATTTT	ATCAAATGAA	ACATATTTTT	GAAATACTTG	ATAAAATGAG	240
ATGCCTGAGA	AAACGTTCTA	CAGTGTCAAT	CTTGGGAGTT	CTTGTCATT	TTCTCCTTTT	300
TATGAAGTTG	TACATTGAAG	ATAGCTATGT	TCTGGAAGGA	GACAAACAAC	TTATAAGGGA	360
AACTCTCGAG						370

(2) INFORMATION FOR SEQ ID NO:596:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 240 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:596:

GAATTCGGCC	TTCATGGCCT	ACTAACGACT	CATCTTTGTT	TTTAGTTTTT	TTAATTAACA	60
ATCGTTCTGT	TCACAATTTT	TAATTTCTTT	TCTTCCCCCT	TCTCCGCAAA	GCACTCAGGC	120
ATCGGACACG	CTATGGTAAA	CAAACTACAT	TGTCTGGTAG	ATATCATTCT	TATTGTCTCT	180
TTTTTTGGGT	TTGCCGTGTG	TTGCCCCCTT	TTCTCTCTCC	AACCCCCCCC	ATTCTCTGAG	240

(2) INFORMATION FOR SEQ ID NO:597:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 224 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:597:

GAATTCGGCT	TCATGGCCTA	GTGTATTGGT	TGTGTGTGTT	TTCTTTTTTG	CATAAGAAAT	60
ATGTCCATTT	AGTCCAGAGG	CTCTTGCTTT	ATCCGGATGA	CGGAGGGTAC	ACGGGGCGTC	120
CGCCTCAGTT	CCCGCCGAAG	GACGTATTCT	CTGAAGTGGG	ACGAGTCTAC	TCCTCCCCCA	180
CAGGAGCCCA	CGATTTCAAA	TCCTCTTTGC	TGCAACCTCT	CGAG		224

(2) INFORMATION FOR SEQ ID NO:598:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:598:

```

GAATTCGGCC TTCATGGCCT AGATATTTTA AAGGAGTGAT GACATCTTTT TCCTATCATG      60
TGAAGAGGGG AAAGAGAAAG GAAAGGGCCC ATATTATTGT GTTCCTGCTT GTGCCAGCTG      120
TTCTATATCT GTTGATCTCA TTTAGTCCTC ATGACAGTTC TATGAGGAGG GCACTGTCAT      180
CATCACCATT GCACAGATGC AGAACTGTG GCTCACAGAG GATAAAGCTA GGTCACTCAC      240
ACAACCCCT GACTCCAGAG CCACACTCG AG                                     272

```

(2) INFORMATION FOR SEQ ID NO:599:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:599:

```

GAATTCGGCC TTCATGGCCT AGTAAGGGAG AAACTGAATG GTGATTCAGA GCATAGAGAT      60
TATGTTTTTT TATGCACAGG GCTTCATCAG AAAAATGGAA GGAATTGTCA ATAACAATAA      120
AATGTTTCAGC TAGATCAACT CAGTATATAG TATGTATTAT ACAATTATTC AAAATAGTGT      180
TTAACAGTAC TGTAATAACA TGAATAAATG TTTGTGCATA TTAAGTGAAA AAGAGCTATA      240
TAAATTATC TAAGTTTATG GTATATGTAG ATTGTTGCAA AAATGTCTTC AATTCTTTAT      300
CCCTCCCTGT ATCCACACCT GTATCAGTTT TCTCGGGGCA GCTGCCTCGA G                                     351

```

(2) INFORMATION FOR SEQ ID NO:600:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 107 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:600:

```

GAATTCGGCC TTCATGGCCT AGAATATTTT TATCATCCCA AAGCTAAAC ATTAATAAAT      60
TTAAGTTTA TTCTAGAGA TTGATGAAC TTGCATATCT AATCGAG                                     107

```

(2) INFORMATION FOR SEQ ID NO:601:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 277 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:601:

GGAAAATTAC	TAAACGTTG	CACACAACGT	TTCACAAAAT	CTTTGTGAA	AGAAGAAAAG	60
GAAATTCAGT	GTGTGAGTCT	CAGCAGGAGT	TAAGCTAATG	CAGCTTAACA	TCATGCCGAC	120
AAAGAAGCGC	TTATCTGCGG	GCAGAGTGCC	CCTGATTCTC	TTCCTGTGCC	AGATGATTAG	180
TGCACTGGAA	GTACCTCTTG	ATCTGGTACA	GCCTCCAACC	ATCACCCCGC	TAAATCCCT	240
AGAAGTCCCA	CTCCTAAACA	CATCCGTATT	ACTCGAG			277

(2) INFORMATION FOR SEQ ID NO:602:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:602:

GAATTCAAAT	TAACATTTTA	CCTTGAAATA	GTTGGCTTCA	GATTAATATC	AACTTAGTTT	60
CAATAGCATA	GGAAATTTGC	TTCACATAT	TTCCATTTTC	TCCCCGCTCT	TTGTGCTATT	120
ATTACTATAC	CAATTAGATC	TCTACACAAT	ATAGGCATAT	CAACACATTT	TGTAATTATT	180
TCCTTATCCA	GTTGTCTTTT	AATATAGATC	TGTGAAGAAA	AGTATTACAC	AAATAGATCT	240
ATTCGTGTTT	TTATAATTAT	TTAATTACCT	TTGGTGGTGC	TGTTTATTTT	TCATGCATTT	300
GAGTTACTGT	CTAGTATTCA	TTCATTTCTC	TCTGAATCAC	TCCCCGGTAT	TGCTCGAG	358

(2) INFORMATION FOR SEQ ID NO:603:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:603:

GAATTCGGCC	TTCATGGCCT	AGCCATCTTA	TTTGAACAT	ATTTTCCTT	CAAAGAAGCA	60
ATAGGTCTCA	ACATAGTGTA	GGTAGCATCA	GGTGACAGAA	AGCCAATTTT	ATTTTCAAAT	120
TTAAGTTAAT	TATCTTCGTG	ATCCTATTTA	TCCACAATTT	CTTTCAGAAA	AGACTGAAAA	180
AACACATTAT	ATTCAGGAGA	TATAATGAAA	TTATTGGAAG	GCATCACTCG	AG	232

(2) INFORMATION FOR SEQ ID NO:604:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:604:

GAATTCGGCC	TTCATGGCCT	AAATATTTTC	CATCTTCCTC	TCCAGTAAAC	ATTCTTTTGT	60
CATCACAGTC	TGTCTCTGAC	ACCTTCGTTA	AAGAGGTCTT	AAAATGGAAA	TATGAAATGT	120
TTTGAACTT	TGGTCAGTGT	GGGCCCCCTG	CAAGTCTTTG	TCAGTCCATC	TCAAGACCTG	180
TGCCTGTCAG	ATTTCAAT	TATGGAGATT	ATTTTAATGT	TTTTTCCCT	TTGATGGTAT	240
TGAATACTTT	TGAAACAGTG	GCACAACGG	CTCGAG			276

(2) INFORMATION FOR SEQ ID NO:605:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:605:

GAATTCGGCC	AAAGAGGCCT	AAAAATATAA	TTTAAAAATA	CATTGCGTAT	TTTCTAAAAC	60
AATAAATTTA	TAGTGTTAAT	ATTCATAGGG	TCAATCAAAA	TGAAGCTTCT	CCTTTGGGCC	120
TGCATTGTAT	GTGTTGCTTT	TGCAAGGAAG	AGACGGTTCC	CCTTCATTGG	TGAGGATGAC	180
AATGACGATG	GTCAACCACT	TCATCCATCT	CTGAATATTC	CTTATGGCAT	ACGGAATTTA	240
CCACCTCCTC	TTTATTATCG	CCCAGTGAAT	ACAGTCCCCA	GTTACCTCGG	GAATACTTAC	300
ACTGACACAG	GGTTACCTTC	GTATCCCTGG	ATTCTAACTT	CTCCTGGATT	CCCCTATGTC	360
TATCACATCC	GTGTTTTC	CTTAGCTACT	CAGTTGAATG	TTCTCCTCT	CCCTCCTAGG	420
GGTTCCCGT	TTGTCCCTCC	TAATCTCGAG				450

(2) INFORMATION FOR SEQ ID NO:606:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 614 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:606:

GAATTCGGCC	AAAGAGGCCT	ATCAGGTGAT	TTAATAATAA	TTTAAAAC	CTATAGAAAC	60
TGCAGAGCAA	AGGAAGTGGC	TTAATGATCC	TGAAGGGATT	TCTTCTGATG	GTAGCTTTTG	120
TATTATCAAG	TAAGATTCTA	TTTTCAGTTG	TGTGTAAGCA	AGTTTTTTTT	TAGTGTAGGA	180
GAAATACTTT	TCCATTGTTT	AACTGCAAAA	CAAGATGTTA	AGGTATGCTT	CAAAAATTTT	240
GTAAATTGTT	TATTTTAAAC	TTATCTGTTT	GTAAATTGTA	ACTGATTAAG	AATTGTGATA	300
GTTCAGCTTG	AATGTCTCTT	AGAGGGTGGG	CTTTTGTGTA	TGAGGGAGGG	GAAACTTTTT	360
TTTTTTCTAT	AGACTTTTTT	CAGATAACAT	CTTCTGAGTC	ATAACCAGCC	TGGCAGTATG	420
ATGGCCTAGA	TGCAGAGAAA	ACAGCTCCTT	GGTGAATTGA	TAAGTAAAGG	CAGAAAAGAT	480
TATATGTCAT	ACCTCCATTG	GGAATAAGC	ATAACCCTGA	GATTCTTACT	ACTGATGAGA	540
ACATTATCTG	CATATGCCAA	AAAAATTTTA	AGCAAATGAA	AGCTACCAAT	TTAAAGTTAC	600
GGAATCACCT	CGAG					614

(2) INFORMATION FOR SEQ ID NO:607:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 293 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:607:

```

GCGAAGACCA TCAAATGAAT TGTCACAATA CTCGAATAAT GCAAGACACA GAAAAGGATG      60
ATAACAATAA TGACGAATAT GACAATTACG ATGAACTGGT GGCCAAGTCA TTGTAAACC      120
TCGGCAAAAT CGCTGAGGAT GCAGCCTACC GGGCCAGGAC TGAGTCAGAA ATGAACAGCA      180
ATACCTCAA TAGTCTGGAA GACGATAGTG AAAAAACGA AAACCTGGGT CGGAAAAGTG      240
AGTTGAGTTT AGACTTAGAC AGTGATGTTG TTAGAGAAAC AGTGGGGCTC GAG              293

```

(2) INFORMATION FOR SEQ ID NO:608:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:608:

```

GAATTCGGCC TTCATGCTTA CTCAGAAAGC CACTGCCCCA AACAGCCAC CTGCATTATC      60
AAACACAGAG AAGAGGAATC ATTCCGCCCTT TTGGGGACCA GAGAGTCAAA TCATTCTCGT      120
GATGCCAGAT AGTAGTTCCT CAGGGAAGAA CAGAAAAGAG GAAAGTTATA TATTGAGTC      180
AAAGGGTGAT GGAGGAGGAG GGGAACACCC AGCCCCAGAA ACAGGTGCAG TGCTACCCCT      240
GGCGCTGGGT TTGGCTATCA CTGCTCTGCT GCTTCTCATG GTTGCATGCC GACTACGACT      300
GGTGATCCTC GAG              313

```

(2) INFORMATION FOR SEQ ID NO:609:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:609:

```

GCCCCATTCG GCCCCATCT CACCCAAGAT CCCCAGAGT CCAGGAGCTG GACGGGGACA      60
CCCTCAGCCC TCATAACAGA TTCCAAGGAG AGGGCACCCT CTGTGCTTAA TCTTTGCCCC      120
TTGTGTCTGT CTCACACACA TCTGCTCCTC AGCAGTCGG TGTGGGGAGG GCATTGCTCC      180
TTAAACCCCA GGTGGGTGAC CCTCCCCACC CAGTCCAGGA CATTTTAGGA AAAAAAAAT      240
GAAATGTGGG GGGCTTCTCA TCTCCCCAAG ATCCTCTTCC GTTCAGCCAG ATGTTTCCTG      300
TATAAATGTT TGGATCTGCC TGTTTATTT GGTGGGTGGT CTTTCCTCCC TCCCCTACCA      360
CCCGTCCTCG AG              372

```

(2) INFORMATION FOR SEQ ID NO:610:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:610:

GGAGCTAAAT TTAAGAAATG CAACTAGCCA GGTGCTAAGA AGCTCAGTTA CACGTTTCTC 60
 AAAAGTTGGC TGTTAGTTCC ATGACTCAGA GTGCACTCAA ATCATTITAA TTACTCGAG 119

(2) INFORMATION FOR SEQ ID NO:611:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:611:

GAATTCGGCC TTCATGGCCT AGGTCCTGTT TGCCTATTG AGCTGCTATT AGTGTGAGAA 60
 GAAACTCAGA TGATAGTAGC AGAAACAGAA AGAGGAAGAG GCTACAAGAG ATGGTAGATG 120
 CTGAACTTAA GGCATTTGAT AACCAATGGA TATAGAAAGA AAAGGAAATG AAAGGACAAA 180
 AATGGCTCTA AGTTTTCAA CTTGACTGAT GAGGAAAATA TTCACATCAA GAATGGACTG 240
 AAGAAATAAG GAGGAGATGC TGGGTTAGGG TGAAAGGAGA TGAGCCCAT TTTACATTGG 300
 AAAGCTCTAT GGAACAACGG AAGTAGTAGT AGCTTTATAT TCCAGTAGTC CAAATTCCTCA 360
 GCTCCAAGAC TCCAGCACTG TGTGCTCTAC AGTATGTTTT GTGATGTGCC TGAGTTTGG 420
 TTTCTTTATT TCAATTAGG ACTCTTCATA CCAGGGTCAG GGGTTATGCT CGAG 474

(2) INFORMATION FOR SEQ ID NO:612:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 283 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:612:

GAATTCGGCC TTCATGGCCT AGTTCTGTG CTCTTGAAAG AACAAAGTTGA TGCTTGTA 60
 GCTGTTTTGA TTATTTTGTAG GCGCATGATA ATGGAGCTTA CAATGAATAA AAAGACATGG 120
 GAACAGATGT TGCAATACT ACTCAGGATA ACAGAAGCTG TCATGCAGAA GCCAAAGGAT 180
 AAACAAATAA AGGACTTGTT TGCCAGAGC TTGGCAGGGT TACTATTGAG GACGCTCATG 240
 GTAGCTTGA TCCGAGCAA CCTCTGTGTG TACATTTC GAG 283

(2) INFORMATION FOR SEQ ID NO:613:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:613:

GAATTCGGCA CGAGGGGCCG CCGTTTTTTT TTTTTTTTTT TTTTCAGGTG CACATAAAGT 60
 TAGTTTATTA ATGACTATAT TTTGAAGCCA GCCATTTTGT CCAATATTTA AATAACAAGC 120
 TGTTTAATAT TAAAGCAGAA AGTACTGCCA CATTGTGACA GAAGTACAGC TTTATCCATA 180
 AACCCCTCAC ACAATTATAC ATTAAATGCT ATTTTATTTT AAGCAAGGCA CCCCTACTTG 240
 TTCTAAAATA TGGGATGTAC TACACCATGT ATTACTCGAG 280

(2) INFORMATION FOR SEQ ID NO:614:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:614:

```
GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAACCA AGAATTCGGC ACGAGGGAAT      60
GAAATTAGCT AACAGCCTTC AGCTACAGAA ACTTTGGGAT CCAGACAGCA TTTGAGCTGA      120
CGCCACGCCC TTCTCAGGCA GCCCCACAG TGAAGGAGSA GGATCTAGAA GGGCCTGGCC      180
ATTTTTCCTC AATGTAGGGT CCCTCTGATG GGAATTCTTT GTCTGGAGAC CCGAGCTGAG      240
ACTTTGTCAG ATTGGCATCT CTGTCCCTGC TCAATGCTGC TTTCCATGCT CCCTTTTCTA      300
TCACAGACAT CATAGCCTGA AATCTTTCCA CACCCAATAC TGCTTCCTAT ACCCCTTAGC      360
CTTTCCTGAT CTCATTGAGG TTACCA'TTTT TCCTCCGTCG CTCGAG                      406
```

(2) INFORMATION FOR SEQ ID NO:615:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 369 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:615:

```
GAATTCGGCC AAAGAGGCCG GAATTTGGCC CTCGAAGCCA AGAATTCGGC ACGAGGCTTT      60
TTTAGGTAAT TCTTTGTACT CCTGCTGTCT ACCTCTCCTC ACACCCGAGC ACCCCCATT      120
TTTTCAAACC TTGGTATCTG TTGGGTGAAC AGTATAATCT TTTCATCTGC TTTTAGAATG      180
TGGGATATTT CCAGTACCTA CTTTTTTTTT TTTTTTTTGC TGAATCCAAA GATATATAAA      240
TAAAATATAT ATATTTTATA AAGATCAGAA TGATATAAAG GAGATACATG TTTCTTCCTT      300
TAAAAAATAA ACGGAAGTTA CATGTTAAT GTTCATATTA TGATGCGAAT TCTCTGGTTC      360
CTCCTCGAG                                     369
```

(2) INFORMATION FOR SEQ ID NO:616:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 461 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:616:

```
GAATTCGGCC TTCATGGCCT AGGATGTCTG AGGTCCTAAC CTGCCCAGTC CTGAATTCCT      60
GGGACTTCAA CGACTCTCTC TCTGCCAAT GATGTGAGTC TTTAGGTAGA GTTATAGCGC      120
AAAGGGCTAC TATCAATGTT ATTAAGCATA AATTATGACT AGAGCCACAG AATGATTTC      180
TCATTAATCC AAAAAAAAAA AAAAAGCAAA CCACTCTTTT ACTTTATGAT GAGCACATAA      240
ACAGTTTTTT TTTCTTTTTA TTTATCTACT TTTACTTACT TAAATTTTAG AGATGGGGTC      300
TTGCTATGTT GCCCAGACTA GACTCAAACCT CCTGGGCTCA AGTGATCCTC TAGCCTCAGC      360
CTCCCAAGTA GCTGGGACTA CAGGAAGGAG CTACTGCACC TGACTCAATT TTTTTTTTTT      420
```

CTGAGATGGA GTCTCACTCT GTGACCCAGG CTTGTCTCGA G

461

(2) INFORMATION FOR SEQ ID NO:617:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 391 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:617:

GAATTCGGCC	TTTCATGGCCT	ACATCAATAA	CAGCCAAACT	GAGACACATA	ATGTTTCTA	60
CGTCCAAGAG	GCTAAATGTG	AGAATCCAGA	ATTGAGAGA	AATGTGGAGA	ATACATCTTG	120
TTTCATGGTC	CCTGGTGTTC	TTCTGATAC	TTGAACACA	GTCAGAATAA	GAGTCAAAAC	180
AAATAAGTTA	TGCTATGAGG	ATGACAACT	CTGGAGTAAT	TGGAGCCAAG	AAATGAGTAT	240
AGGTAAGAAG	CGCAATTCCA	CACTCTACAT	AACCATGTTA	CTCATGTTC	CAGTCATCGT	300
CGCAGGTGCA	ATCATAGTAC	TCCTGCTTTA	CCTAAAAAGG	CTCAAGATTA	TTATATTCCC	360
TCCAATTCCT	GATCCTGGCA	AGAATCTCGA	G			391

(2) INFORMATION FOR SEQ ID NO:618:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:618:

GAATTCGGCC	TTTCATGGCCT	ACGTGAAGAC	AAGATGAAGT	TCACAATTGT	CTTGCTGGA	60
CTTCTTGAG	TCTTTCTAGC	TCCTGCCCTA	GCTAACTATA	ATATCAACGT	CAATGATGAC	120
AACAACAATG	CTGGAAGTGG	GCAGCAGTCA	GTGAGTGTCA	ACAATGAACA	CAATGTGGCC	180
AATGTTGACA	ATAACAACGG	ATGGGACTCC	TGGAATTCCA	TCTGGGATTA	TGGAAATGGC	240
TTTGCTGCAA	CCAGACTCTT	TCAAAGAAG	ACATGCATTG	TGCACAAAT	GAGCAAGGAA	300
CTCGAG						306

(2) INFORMATION FOR SEQ ID NO:619:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:619:

GAATTCAAGG	CCAGCCCGGA	GCTGTACCTT	GGAAGGAGGA	GCCAAAAATT	ATGCTGAGAG	60
TGATCACAGT	GAAGACGAGG	ACAATGACAA	CAATAGCCCC	ACCGCAGAGG	AGTCCACGAA	120
GAAGAATAAG	AAGAAACCAC	CGAAAAAAA	GTCTCGTTAT	GAAANGACAG	ATACCGGTGA	180
GATAACATCC	TACATCACTG	AAGATGATGT	GGTCTACAGA	CCAGGAGACT	GTGTGTATAT	240
CGAGAGTCGG	AGGCCAAACA	CACCGTATTT	CATCTGTAGC	ATTCAAGACT	TCAAACCTGGT	300
AAGCGTTTTT	AATGTGCTGT	TCACTCTGCT	CTGTATTCTC	TCTTTTCCCA	GTTCCATTGG	360

CGCTCTCGAG

370

(2) INFORMATION FOR SEQ ID NO:620:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 183 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:620:

GAATTCGGCC TTCATGGCCT AAAAACCTTA CAACTAAAGC AAATAGACTT TTCAAGAATT	60
TAAATAGGAT TCCTTCCCTT TAATCAATTA ATTATCCACT TTGTCATGGT GTCACCTGT	120
AATTCATGG TTTTGTGTGT GTGTGTGTGT GTGACAGAAA TTTACAAACA ATGTGATCTC	180
GAG	183

(2) INFORMATION FOR SEQ ID NO:621:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:621:

GAATTCGGCC TTCATGGCCT ACAACTAATT TGATCATATT AACAGAGGT TGGTTTTTAA	60
ACCAAGCAGT ATAAATATAA ATACAGCCTT GGGTAGATCA TAGTCAAATC ATCCAAATGC	120
AACCTCAGCT TCAAAGATTG TAAAGTCTTT TCTTTCCCTT TTTCTCCTTT CCTTTTTTT	180
TCCTCAAAT ATTTATTTAC TACCTACCAT GTGCCAGGCA CTGTGATGGG CTATGAGGAT	240
GCAGTGGGGG ATAGGACAGA TGCCATCCCT GCCCTGAGGA GACTTGCACT TTATTGGAAA	300
AGATGGACAT CGTAAATAT ACAATCATAC AAATAAAAT TACATAAATA ATTCAGTACT	360
TCAACTTGTG GGAGGTACAG CAGTTTATAA TAATAACATC CCTCCACCT TCTTGAGAGA	420
GTCATTGGTT GCCCCACTTC TCTTCATGAA TGAGAGGACA TGATTAAACC TATCATTCTA	480
GGTAGGAGTT TACTGTGGGA TGGATATCAA TCTTCTATTA ATATGTTTGT GCTCATGCTC	540
TCCATTTTGC AATGGACGTC TCGAG	565

(2) INFORMATION FOR SEQ ID NO:622:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:622:

GAATTCGGCC TTCATGGCCT AAAATGAAAG CTATGTCTTA GAACCAATGA AAAGTGCAC	60
CAACAGATAC AAACCTCTCC CAGCGAAGAA GCTGAAAAGC GTCCGGGGAT CATGTGGATC	120
ACATCACAAC ACACCAAACC TCGTGCAAA GAATGTGTTT CCACCACCCT CTCAGACATG	180
GGCAAGAAGG CATAAAGAG AGACCCTCAA GGCAACTAAG TATGTGGAGC TGGTGATCGT	240
GGCAGACAAC CGAGAGTTTC AGAGGCAAGG AAAAGATCTG GAAAAAGTCT CGAG	294

(2) INFORMATION FOR SEQ ID NO:623:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:623:

```

GAATTCGGCC TTCATGGCCT AGCTTCTGGT AATGGCGGAC TAGATGATTT AGAGCAACCC      60
ACCCATTGAA AAGAACTACA AAACGTCAGA TCTCTAAAAG GCTACAAAAT TAATACAATT      120
GTGAGGAATT GCTAGGTTAT ACTACAAGAG AACAGAAGCA TCCAGAGAGG TAAGCCTAGG      180
ACTTAAACT ATATTTTAT TGAAGGTATC TGTGGTTGAG TAATAAGCCT GTGCTAACT      240
GCGTGGAAT TATGGCAGT TCAAGGCACT ATAGTAACAG AAGTCAGAGC CCAAGGCCCA      300
TCAAAGGGG TGGAGTGTTC CTGACAAAC CATCACCCAT AGTATGCTGG GAACCGCAAA      360
TGTTTATACC TTCAGGGTAA TTGTAATCAA AAAATATACT AGCCCTTACA AAGTCTTGT      420
GCTTGGCTTT GCATCATCTG GGTGGACTAG TGAAGTGTAA GTTCTGAACA AATATTATGG      480
AGGCAACTCG AG                                         492

```

(2) INFORMATION FOR SEQ ID NO:624:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:624:

```

GAATTCGGCC TTCATGGCCT ACTTCCCTGA GCTGGGGTTT CCCTGCTGTG CCAGTTGTGA      60
GCTGTCTCTG GTGTTACCGA GGCTGTGCCT AGAGAGTGGA GATTTTGTAT GAAAGGTGTG      120
CTCGCTCTCT GCGTTCATC TTCTCTCTCC TCCTTGTGCC TGCAAACCAC AAGATAAAGG      180
TAGTGGTGTG TCTCGACCCC ATCAGCCTCT CACCCACTCC CAGACACACA CAAGTCCTCA      240
AAAGTTTCAG CTCGTGTGT GAGATGTGCA GGTTTTTTCT AGGGGGTAGG GGGAGACTAA      300
AATCGAATAT AACTTAAAT GAAAGTATAC TTTTATAAT TTTTCTTTT AAAACTTGGT      360
GAAATTATTT CAGATACATA TTTTAGTGTC AAGGCAGATT AGTTATTTAG CCACCAAAAA      420
AAAGTATTGT GTACAATTG GGGCCTCAA TTTGACTCTG CCTCAAAAAA AAGAAATATA      480
TCCTATGCAT CTCGAG                                         496

```

(2) INFORMATION FOR SEQ ID NO:625:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:625:

```

GAATTCGGCC TTCATGGCCT ACAAATGA TTATGACAAG ATTGTCTACT ATGAAGCAGG      60
GATTATTCTA TGCTGTGCC TGGGGCTGCT GTTTATTATT CTGATGCCTC TGGTGGGGTA      120
TTTCTTTTGT ATGTGTCGTT GCTGTAACAA ATGTGGTGGA GAAATGCACC AGCGACAGAA      180

```

GGAAAATGGG CCCTTCCTGA GGAAATGCTT TGCAATCTCC CTGTTGGTGA TTTGTATAAT	240
AATAAGCATT GGCATCTTCT ATGGTTTGT GGCAAATCAC CAGGTAAGAA CCCGATCAA	300
AAGGAGTCGG AACTGGCAG ATAGCAATT CAAGGACTTG CGAACTCTCT TGAATGAAAC	360
TCCAGAGCAA ATCAAATATA TATTGGCCCA GTACAACACT ACCAAGCTCG AG	412

(2) INFORMATION FOR SEQ ID NO:626:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:626:

GAATTCGGCC TTCATGGCCT AGTTAGGTGG CTTTGTAGTGT ATTGACAAAG TTGTGAACCC	60
ATTATCACAA TCTAATTTTA GAACATTTTT ATCAGCCTCC TTGCCCCCTA AAAAAACCCA	120
GTACTTTTTA CCAATCCAGT CATTAAAAAC TTAACACATA TTTAATAGAT GGATAGATAG	180
ACAGGAGGAT GGACAGACTG AAGGAAGAAT GGATGATTAT GTATAAATAA ATGAAAAAAC	240
AAAAACTATC CCCAAATCAT AAGGGTATAC GCAATGCTTT CCTGTGGCAA AAGATTGGGA	300
ACATGTACAG CAGATTTTTT TTCAAATGTT CATAATTCTA AATTCCTCAA ATGGTCTACA	360
CAACTTCTCG AG	372

(2) INFORMATION FOR SEQ ID NO:627:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 575 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:627:

GAATTCGGCC TTCATGGCCT AGGAGAAAGG AAGGGAAGCA TTACTGGGTT ACTATGCACT	60
TGCGACTGAT TTCTTGGCTT TTTATCATTT TGAACCTTAT GGAATACATC GGCAGCCAAA	120
ACGCTTCCCG GGGAAAGGCG CAGCGAAGAA TGCACTCTAA CGTTAGTCAA GGCTGCCAAG	180
GAGGCTGTGC AACATGCTCA GATTACAATG GATGTTTGTC ATGTAAGCCC AGACTATTTT	240
TTGCTCTGGA AAGAATTGGC ATGAAGCAGA TTGGAGTATG TCTCTCTTCA TGTCCAAGTG	300
GATATTATGG AACTCGATAT CCAGATATAA ATAAGTGATC AAAATGCAAA GCTGACTGTG	360
ATACCTGTTT CAACAAAAAT TTCTGCACAA AATGTAAAAG TGGATTTTAC TTACACCTTG	420
GAAAGTGCCT TGACAATTGC CCAGAAGGGT TGGAAAGCCAA CAACCACTAT ATGGAGTGTG	480
TCAGTATTGT GCACTGTGAG GTCAGTGAAT GGAATCCTTG GAGTCCATGC ACGAAGAAGG	540
GAAAAACATG TGCCTTCAA AGAGGGGATC TCGAG	575

(2) INFORMATION FOR SEQ ID NO:628:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:628:

```

GAATTCGGCC TTCATGGCCT AACAGGGTCT TGCTCTGTCA CCCGGGATGG AGTGTAGTGG      60
CGCAATCACA GCTCACTGCA GACTCAGCCT CCCAGGATCA AGCAATCTC CCACCTCAGC      120
CTCCCAAGTA GCTGGGACCA CAGGTGCACA CCATCATGCC CAGCTAATTT TTGTATTTT      180
TTGTAAAGAC AGGTTTCACT GTGTTACCCA GGCTGATCTC GAACTCCCGT ACTCAAGCAA      240
CTCCCCACCT CAGCCTCCCA AAGTGCTGGG ATTACAGACG TGAGCCACAG CGCGGGGCCC      300
CAAAATCTAT TTAAATGTA AAGAAACCCA AAAGTAACAG TTTTGTA AAAAATTAC      360
GTAATGTTT GTAGTAAATT CTAACACTG TGTATCTTTG TGTCTAGTTA AATCCTAGGC      420
TTACAGCTAA AATTCAATGA GAAGCAAGT ACTCGAG      457

```

(2) INFORMATION FOR SEQ ID NO:629:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:629:

```

GAATTCGGCC TTCATGGCCT AGAAAGCTAT CATTATTGA GAGTTAATTG TATATTAAGT      60
ACCATGCTAA GTGCTTTGTA TGTATTATTT ATCTTTATAA AAATCCTATG AAATGAATAC      120
TGTTATTTTC CCCCATTTATA CAGATGAAGA TAGAGAAAGG AAGAAAAGGG AGGGAAGAG      180
GAATACCAT TCACTGAGCA ATTTTACTGA AATATTTTAT GGAGCATTG TGGGTTTTGT      240
TTGTTTGCTT GTTTTGTTT TTTGTTGTT TTTTTTTTG AGACAGAGTC TCACCTTGTG      300
GCCCAGGCTG GATCTCGAG      319

```

(2) INFORMATION FOR SEQ ID NO:630:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:630:

```

ACGGTGAAAC CCTGTCTGTA CTAAAAATAC AAAAAATTAG CGGGGCATGG TGGTGGGCAA      60
CTGTAGTCCC AGCTACTCGG GAGGCTGAGG CAGGAGAATG GCATGAACCC AGGAGGGCGGA      120
GCTTGCACTG AGCCGAGATC ACGTCACTAC ACTCCAGCCT GGGCGACAGA GCGGAGACTCC      180
GTCTCAAAAA AAGAAAAAAC CAAGACAAAA CAAAAAATAA CTTTGTCTGT TAAGTACAAT      240
ATCTGTGTTT CTCAGGGACA GTTTCTATTG ACCATTGTTT TTCTGTGTCA TAGACTATCC      300
TTTCCTTTT TTGTACATCT TGTAAATTTT GTTTTATTAA AACTGGAATT TTAATAATAA      360
TGCAGTGTGG CAACTCTACT GCTTGATTG GCTCAAAGGT ATATTATTTA TTTTAAATA      420
TAACAAACCA ATATTGGGT TCTCTATTCT ATAGTTTGTG CATTTTGAAT GCAACAACCTG      480
TCTTATTCAC CATTTAATTC TCAGTACTAC CGTTTCTAGT ACACAATATG CACTTAATGA      540
ATATGAGGGT CCTCGAG      557

```

(2) INFORMATION FOR SEQ ID NO:631:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:631:

```

GAATTCGGCC TTCATGGCCT AGACCGTGCC AGGTATTGAG AGCGACCCTC ACATTCCTAC      60
AGTGCTCTGT GTGGCATCTT AATGAAACTT TATTCTCTCC CCTTAAATGA GAAAGAATAG      120
CTAGTTGTCA TCCTTTCTGA ACCGATTTTG TCTTCAAAG GTAGTAGTGT ACCAGGCCTG      180
CTATTTTGCA AAACGGTCTC CACCAAAATC GAATTACCTG CCTCGCGGGG CAGGCGTGTT      240
GACCAGGTGG ACTCTAGAAG TAGGTGGTTT GCTTGGTTTC TTTCTCTTTT AAGGTTTCCC      300
TTTCTTCTTC TTCTTTCTG TGTTTTTTTT TTTTTTTTTT TTTTTCATAT ATAGAAACTG      360
TCCCTAAGAG AGGAAACCTT TCTGGCCATG TTATTCCAGG AATCTTTTGT CCCCTAAGTT      420
TGACCTTGTT CTTTCGTTC A CCTTTACTC TTGCATCTCG AG                          462

```

(2) INFORMATION FOR SEQ ID NO:632:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:632:

```

GAATTCGGCC TTCATGGCCT ACATAAAATC AGTTGACTAT TGTGCAACAT AGAATTATTG      60
TTTGTGTGAA ATTACCGCTG AAGGACCTTG CCTACATTCA AGGGTCTATT TTTATTTTTC      120
CAGGTATTCT TTCACATTAG TGACATTATA GTCTAGTACA ACTGCTTGAT AATTGGGAGA      180
AACTAACATT AATTTTAGAT AGTGATTGAT AAAATTGGGC CTGCCAAATG CATTTTAAAA      240
ATAATTCTAG GATTATCTA TGCTCATTTT TAGTATACCT CATGATATAT AAGACATCTT      300
TCTTTTGTC AATCAGTTCT TCAGATACTA AGACAGAGGT CCTCGAG                          347

```

(2) INFORMATION FOR SEQ ID NO:633:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:633:

```

GAATTCGGCC TTCATGGCCT AGGTGGTGCA ATAATTATAA ATGTTGCCAG TCAATGCCAA      60
CCAGTGTCTG ATTGGCTTCC TGTGCATGTC CAATTCCTC TGTGACACTG TGTGGTGCC      120
AGAGCTTCTG AATCTTCTTG AATCGCTCTT TGCATAAATG TAAAGGATTT CCCCGTCTGA      180
GTCCCTGGTC GGTCTCCCCA TAATCATCAA GGTAAAGGAGG AGAATAAAAA CAGCCTTTGG      240
TTTTGCCAGC TAAAAATAGC ACCTGACATT CCCGTACTCT CAGGAAGATG CCCACTCCAG      300
AGCCACAGGA GTAGGTGTGA GCTGTGCAGG CTCCTACATC CTCCCCTTCC AGTTCAGTCT      360
GGCAGCAGTA ACTCTGGGAG CACAGCAGAG ATCCGCACAC AAGGCACAGA GTTGGGGCTC      420
TGCTCTTATC ACCACCTGAT TTCGGGCACC TCGAG                          455

```

(2) INFORMATION FOR SEQ ID NO:634:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:634:

```

GCATGAAGGC CGGCCTTCAT GGCCTACAGG CTATGTACTG TATGATTCCA AATATGACAT      60
TCTGAAAAAG GCAAAACCAG GGACACAGTG AAAAGATCAG GGGTTGAGAG GGGAAAAAAG      120
GAGGGATGAG TAATCAGAAC ATACAAGATT TTTTAAAGGC AGTGAACCG CTCTGTATAA      180
TACCATAATA GTGGATACGT GTCATTATGC ATTCATCCAA ACTCCTAGAA TGTACAGCAC      240
AAATAGTGAA CTGTAATGTA AATGCAGTGT GTAGGTGTTT ATACAAAAAA ACAGATGGAA      300
AGATTTTGTA CATAGCTCTA TGTGAAAATG TATTTATTTA TTAAGAGCAA AAATATGCTT      360
ATTTCAAATT TCCACGTACG ACTTTTTCAA AAAGACACGA TCCACTGAAA TAACCCTCCA      420
AAAGAATTTC TATAATCTAT AGCAGGTGTA CATGTTGTTA ATCAAGTGCT TAATGTTACT      480
CGAG

```

(2) INFORMATION FOR SEQ ID NO:635:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 487 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:635:

```

GAATTCGGCC TTCATGGCCT ACCCCACCAG AGGACAGACG TTGAAAGATA CCACGTCCAG      60
TTCTTCAGCA GACTCAACTA TCATGGACAT TCAGGTCCCG ACACGAGCCC CAGATGCAGT      120
CTACACAGAA CTCAGCCCA CCTCTCCAAC CCCAACCTGG CTGTCTGATG AAACACCACA      180
ACCCAGACC CAGACCCAGC AACTGGAAGG AACGGATGGG CCTCTAGTGA CAGATCCAGA      240
GACACACAAG AGCACCAAAG CAGCTCATCC CACTGATGAC ACCACGACGC TCTCTGAGAG      300
ACCATCCCCA AGCACAGACG TCCAGACAGA CCCCAGACC CTCAAGCCAT CTGGTTTTCA      360
TGAGGATGAC CCCTTCTTCT ATGATGAACA CACCCTCCGG AAACGGGGGC TGTGTGTCGC      420
AGCTGTGCTG TTCATCAGAG GCATCATCAT CCTCACCAGT GGCAAGTGCA GGCAGCAGTC      480
TCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:636:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:636:

```

GAATTCGGCC TTCATGGCCT AATTTTATTT AAATTTTAT ATTTATATAT TTTATTTAAA      60
ATTTTCATGA AATGGCCAAG CAGGGTTTAA TATAAAATGG AAACAGGGTT TATCTCAGAA      120
ATTTGGTGGC TAAATTCCTT GTATCCCGTC TTATCTAGGG ATGTTGTTTG TTTCAAGGTT      180
CTACCTTGAG AGGAGCCTGT CATTTTCTTT TTTGTGTGCT GCITTGCTTA GTTGACATCT      240
TGGCTTTATG TGCTCCTGTT GAATGCATTG GGAAATTTTC TTTCTTCTTT CTATGTCCTG      300
AAATAGCTTA TATAAGAGGG AAATCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:637:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 625 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:637:

```
GAATTCGGCC TTCATGGCCT AAAAAATAC TTTCAATTGT TTTGCTATTA CTAGTTTCTC      60
ATTTTTTATT GCACTTGCAA TCATTTTAGG AATATCCTCA AAAATATGCTC CAGATGAAAA      120
TTGCCAGAT CAAAATCCTC GTCTCAGGAA TTGGGATCCA GGACAAGATT CTGCAAAGCA      180
AGTTGTTATC AAGGAGGGGG ATATGCTCCG TCTGACCTCA GACGCCACCG TGCATTCTAT      240
AGTCATTAGG GATGGAGGAC TGCTTGATTT TGGGGACAAT AAAGATGGAT CCAGAAATAT      300
TACTTTGAGG ACTCATTACA TCCTGATCCA GGATGGTGGG GCGCTTCATA TTGGAGCAGA      360
AAAAATGCCG TATAAATCCA AAGCGACAAT TACCTTGAT GGCAAGTCAG ATGAAGGTGA      420
AAGTATGCCA ACATTGGGCA AAAAGTTTAT TGGTGTGGAA GCTGGCGGGA CACTGGAGTT      480
ACATGGGGCA CGGAAGGCAT CGTGGACGTT GTTGGCAAGG ACCCTGAATT CCTCAGGCTT      540
GCCGTTTGGG TCCTATACCT TTGAAAAGGA CTTTCCCGG GGCCTCAATG TGAGGGTCAAT      600
TGACCAAGAC ACGGACGCTC TCGAG
```

(2) INFORMATION FOR SEQ ID NO:638:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 506 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:638:

```
GAATTCGGCC TTCATGGCCT AGAGAACTTT TTGAGGGGCTT TTTTTCCTCC CTTTAAAGC      60
TATTTTGTAT GTAGACTTAA TTTTCTAAT TTGCCCACCT CTGGCAATCT GAAATCATTA      120
AAAAGGACAC AATTCAAATT TATGTAAAG GTCATAAATT TTGCCAGGA CTCATATATT      180
TCTCATTTTT CAAAAAATAA AATCTTATTT ATGCATTATA GCGACTTGGT TTTCACTTTA      240
TCTTGAATTA TAGCTTTTAA GAGGCAGAAA GAATCCTTTT TATAAGGACA GTCTCAAGTG      300
TACACACAGA TTAATATTA CAAATATAGG TTGCAAATAA AACTTTTCAA ATGTGGGATT      360
ATAGGAAGCA AAAGAGAACC AACCAAAGCA TCAACAAATT TACCTTTTGG TTTTTCCTTA      420
AGATTTTCTT TATTTCTTGA GCTGCTTTTG CATTAGCATT AAATAACATT CTTATTGGAG      480
TGGTATGTGC ATGGCCCAAG CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:639:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:639:

```
GAATTCGGCC TTCATGGCCT ACTCCAGCTT TATTATCTCA GCTACCATCA AACTATATTA      60
CATCAAATTA TCATCATTAC TCTCCTGCAC AGTAACTTTC TTTCTGCTCC ACTAAGAAGC      120
TTACTCCCAT CTGTGTTATT CTCTATATCG TAGCTGGACT AATCTTTTCA AAGTGCAAAG      180
CCAATCACAA TACCACCTGC TTAATAATCCA TCAGTGGCTA ACTTTTCATT CTAGGACGAA      240
AAGAAAATTC TATAACATGA CTTCAAAGGC TCTGCATGTC CTTCTATTTC TCTGTGCTC      300
```

TCTAGTCTTT TCTTTGATGG TCTCCACTCC AGCCCTACTG GCTTCTTTCT GGAATCAATG 360
 TCACCCACAA CCCGTCACGC CACTCGAG 388

(2) INFORMATION FOR SEQ ID NO:640:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:640:

GAATTCGGCC TTCATGGCCT ACTCCGCTCT GGCCCAAGAG GAGGCCAAGA AGGACGAGCC 60
 CAAGAGCGGC GAGGAGGCGC TCATCATCCC CCCCACGCC GTCGCGGTGG ACTGCAAGGA 120
 CCCAGATGAT GTGGTACCAG TTGGCCAAAG AAGAGCCTGG TGTGGTGCA TGTGCTTTGG 180
 ACTAGCATTI ATGCTTGCA GGTATTCTT AGGAGGAGCA TACTGTACA AATATTTTGC 240
 ACTTCAACCA GATGACGTGT ACTACTGTGG AATAAAGTAC ATCAAAGATG ATGTCATCTT 300
 AAATGAGCCC TCTGCAGATG CCCCAGCTGC TCTTACCAG ACAATTGAAG AAAATATTAA 360
 AATCTTTGAA GAAGAAGAGC TCGAG 385

(2) INFORMATION FOR SEQ ID NO:641:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:641:

GAATTCGGCC TTCATGGCCT AGCAAGGAGA ACTATTGTCT TATGATCAGC TTTGCCATCT 60
 TTCTGTCTCT TATCATGTTG GTGGAGGTGG CCGCAGCCAT TGCTGGCTAT GTGTTTAGAG 120
 ATAAGGTGAT GTCAGAGTTT AATAACAACT TCCGGCAGCA GATGGAGAAT TACCCGAAAA 180
 ACAACCACAC TGCTTCGATC CTGGACAGGA TGCAGGCAGA TTTAAGTGC TGTGGGGCTG 240
 CTAACACAC AGATTGGGAG AAAATCCCTT CCATGTCGAA GAACCGAGTC CCCGACTCCT 300
 GCTGCATTAA TGTACTGTG GGCTGTGGGA TTAATTTCAA CGAGAAGGCG ATCCATAAGG 360
 AGGGCTGTGT GGAGAAGATT GGGGGGCTCG AG 392

(2) INFORMATION FOR SEQ ID NO:642:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 132 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:642:

GAGTTGAAGT GSCCAAAAAA TTATAACACT CTCCTACTTT CATATCTTGA TTTTAATTTT 60
 TTCCCTTACT TGTATTTTAT TTCTGAGTGG CTAATGGATC TTAGTCTAAG AACTGGAGGT 120
 GGAGAACTCG AG 132

(2) INFORMATION FOR SEQ ID NO:643:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:643:

```
GCACAAAGAC GCATTTCATC TGAGTTTCCC TGAAAGCTAG AATAAGTTTG CTGGTGTGAC 60
CTGGGATCCT GTCTTCTATA GCTTTGTATC AAGCAAACCTC AGCATTGTGT CTTGAATGCA 120
TGTCATGTGC AGCCTGCGTT TATGTGCGAC TGAGCACTTG GGTGGGGACA TCTTAAGGCT 180
GTTTATATT CTTTTTCATG TGTTGTTGTT GTTGTGTTG TTGTGTTTT GGAGAGAGTC 240
TCGCCCAAAG CTCGAG 256
```

(2) INFORMATION FOR SEQ ID NO:644:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:644:

```
GTGCTCGCAG CCNTGGTGGC CTGGCGCTCG GCGTNCCTTG TCTGCCTCGC TTTCTCCTTG 60
GCCACCCTGG TCCAGCGAGG ATCTGGGGAC TTTGATGATT TTAACCTGGA GGATGCAGTG 120
AAAGAAACTT CCTCAGTAA GCAGCCATGG GACCACACCA CCACCACCAC AACCAATAGG 180
CCAGGAACCA CCAGAGCTCC GGCAAAACCT CCAGGTAGTG GATTGGACTT GGCTGATGCT 240
TTGGATGATC AAGATGATGG CCGCAGGAAA CCGGGTATAG GAGGAAGAGA GAGATGGAAC 300
CATGTAACCA CCACGACCAA GAGGCCAGTA ACCACCAGAG CTCCAGCAAA TACTTTAGGA 360
AATGATTTTG ACTTGGCTGA TGCCCTGGAT GATCGAAATG ATCGAGATGA TGGCCGCAGG 420
AAACCAATTG CTGGAGGATG GCTCGAG 447
```

(2) INFORMATION FOR SEQ ID NO:645:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:645:

```
GCTCAGCAAC ATTTTAGGAA CAACATTGGT GAGTATATGA GAATAGCCGT GACCTCCATA 60
TTTCATCAGC CGGGTTTTCG TATGTATGTC ATGTGCTACC AGAATTCGAT CTTACAGGCC 120
CTCTCCACC AGGAGACGCA CCTGTGAAA AATGTAACT CATTAGATGT CATTGTCTT 180
TCATTTTCGC TTTTCAGGAT GCTTCAACT TTTTACTCAT TAACCTATTG TGCTTGTGCT 240
AAAGATACTG ACTTCTACTG TGGCGTGTGT ACTGAGAGAC TCGAG 285
```

(2) INFORMATION FOR SEQ ID NO:646:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 257 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:646:

```

GGAGATTGA AGAAGAATTG AATGAAAGGA TGATTCAAGC AATTGATGGG ATTAATGCAC      60
AGAAGCAATG GCTCAAGTCT GAAGACATTC AGAGAATCTC ACTGCTTTTC TATAACAAAG      120
TACTAGAAAA AGAGTACCGG GCCACGGCAC TGCCAGCGTT CAAGTATTAT GTGACTTGTG      180
CCTGTCTCAT ATTCTTCTGC ATCTTCATTG TGCAGATTCT CGTGCTGCCA AAAACGTCTG      240
TCCCGGGCTA TCTCGAG                                     257

```

(2) INFORMATION FOR SEQ ID NO:647:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:647:

```

GGGGCAGCAG TAAATCCAG GCCCGAATGG AACAGCAGCC CACTCGTCCT CCACAGACGT      60
CACAGCCACC ACCACCTCCA CCACCTATGC CATTGAGAGC TCCAACGAAG CCTCCAGTTG      120
GACCCAAAAC TTCTCCCTTG AAAGATAACC CGTCACCTGA ACCTCAGTTG GATGACATCA      180
AAAGAGAGCT GAGGGCTGAA GTTGACATTA TTGAACAAAT GAGCAGCAGC AGTGGGAGCA      240
GCTCTTCAGA CTCTGAGAGC TCTTCGGGAA GTGATGACGA TAGCTCCAGA CTCGAG       296

```

(2) INFORMATION FOR SEQ ID NO:648:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:648:

```

GTGCANATGT ACGGTGACCA CTGGGCCCTT GACCGGGCGG CTCGAACCTG GCGGCCCTGG      60
GACCAGCGTC TTCTTCTCA ACAGCCCGTT CCCCAGAATG TCCAGCCACT CTTCTGGGGC      120
CGGGGCTGGG GCGGGCTCGG GCTCCATGGC AGCAAGGAAC TCTCGGGCCA GGGCCCCAGG      180
CTGCTCANCC TCCTCCGCCG GGGGTTGTCC CATGTCCTCC AGCGGTGGCA GCTCACTCAG      240
GTCATCCTCT TCCTCCTCTT CCTCCTCCTC TTCCTCCTCA CCCTCTGCAT CCTCAACCCC      300
ATCCAGTACC TCGAAGTCCT CGAG                                     324

```

(2) INFORMATION FOR SEQ ID NO:649:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:649:

```

GAATTCGGCC TTCATGGCCT ACTTCCTGAT ACAGATACAT TTACTACAGA AAATTCCTT      60
TATAGGTGTA AATTTCTGTT TACAACAGGC GAGTCGAAAA ATAATAAGAA CAAAAGGAAA      120
AAAAGCAGTC ATACTTTATT TTAGGCAGTT GAGGGGTAGC TGAATAAGTT ATCCTGTGTT      180
GTTTGGTTCT GTTACTTATA GCTCAAAGTC ATCAATATGC CAGGGTGGCA TGTTTGGGGA      240
TGGTGCATTC TTGTCTTTTG CAGTCATTTA TCAGGGTGGC GTTTCCTAAA TTCTAACACA      300
GACCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:650:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:650:

```

GGTGACGCCT GCTTCACATC TCTAATGAAC ACCCTCATGA CGTCGCTACC AGCACTAGTG      60
CAGCAACAGG GAAGGCTGCT TCTGGCTGCT AATGTGGCCA CCCTGGGGCT CCTCATGGCC      120
CGGCTCCTTA GCACCTCTCC AGCTCTTCCG GGAACACCAG CATCCCGAGG GTTCTTCGCA      180
GCTGCCATCC TCTTCCTATC ACAGTCCACG GTGGCGCGGG CCACCCCGGG CTGAGACCAG      240
GCAGTGCTAG CCCTGTCCCC TGAGTATGAG GGCATCTGGG CCGACCTGCA GGAGCTCTGG      300
TTCCTCGAG                                     309

```

(2) INFORMATION FOR SEQ ID NO:651:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:651:

```

GCAAGGGCAG GCGGGTCCCC CAGTCCCGCC ATTACGGGTT GTCAGACCGT CTGCGTGTGG      60
CAGGGCTCCC AAGGGCAGGC GGGTCCCCCA GTCCCGCCAT TACGGGTGTT CAGACCGTCT      120
GCGTGTGGCA TTTTGTGGCT TATAAGCTTC ACCCACTCAC CCCCACCCA CACCCACAT      180
CCCCCTGCCG GCAGCCCCCTC AACCTAAGAA GGCCAGAGCA TATTTATTTT CGGAGGGAGC      240
AGATTACTTC TCCCAGAGAA AGGAAAATCT TGGAAAAGAT TAAAAACAC AAATCTAAGC      300
CTTGACGGTT TTTTTCCTCC TTTTGACCCC CTTCCCATCT CTTCAGAATT TATTCCTATG      360
GCTTTTTTTT TTCTGTGCG TGTTCTCGAG                                     390

```

(2) INFORMATION FOR SEQ ID NO:652:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:652:

```

GAATTCGGCC TTCATGGCCT ACCAAATTCC CTGCCTGTGC CTGCTGGGAC CAGACTCCGC      60
TGTCATGAGG GTGACATCCG CCACCTGTGC TCTTCTGCTG GCTCTGATCT GCAGCGTCCA      120
GCTGGGGGAT GCCTGCCTGG ATATCGATAA ACTGCTTGCG AATGTTGTGT TTGATGTGTC      180
CCAAGACCTC CTGAAGGAGG AGCTTGCTCG TTACAACCCC AGTCCCCTGA CAGAGGAGTC      240
CTTCCTCAAT GTCCAGCAAT GCTTTGCCAA TGTCTCGAG                                280

```

(2) INFORMATION FOR SEQ ID NO:653:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:653:

```

GGTGTTTGGC CACAGTTCGG GACCTATGGT AGAAAAATAC TCAGTAGCTA CCCAGATTGT      60
AATGGGTGGC GTTACTGGCT GGTGTGCAGG ATTTCTGTTC CAGAAAGTTG GAAAACCTGC      120
AGCAACTGCA GTAGGTGGTG GCTTTCTTCT TCTTCAGATT GCTAGTCATA GTGGCTATGT      180
GCAGATTGAC TGAAGAGAG TGAAGAAAGA TGTAATAAAA GCAAAAAGAC AGATTAAGAA      240
ACGAGCTCTC GAG                                253

```

(2) INFORMATION FOR SEQ ID NO:654:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:654:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGGCCTCCC AAAGTGCTGG      60
GATTACAGGG GTGAGCCACC GCACCCAGCC TGTGAAATAC TATTTTATG GTAAGCTAGA      120
ATTTTAAAC TATTTCTTGC AAGTTTAGGA TTAAATGAAT TACATTATGT AAAATTACAT      180
CTTTGTCTGT ATTACGTATT TGTATACAGT TGAATAGTTT TGGTAACACG TACCTTAGTG      240
CTTTACATTG ATTGGCTCAT TAATTTTATA TTTTGAGTAA TAATCATCTA ATTTTATTAT      300
TGTACAATTC AGTCTTAAAT TATGTTATGA TGTGAAAATG GTAGCTTTCT TGAGTGTATT      360
TATTTTGTG GTAGTGGGCA ATGTAATTAT CACACATAAA ATGAACTGTG AGACTTTTGA      420
GCCTGAAATA TTATTCATAT TATAATGCTC CTCGAG                                456

```

(2) INFORMATION FOR SEQ ID NO:655:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:655:

```

GAATTCGGCC TTCATGGCCT AGTATATACA TGCATTTAAT TGTGATTTTA TCACCTTTCC      60
CATTCTTTTC CCCACAAGCT GGCATTTTCAG TAGTTGCTTT TGAATAATGG TTTTGGTTAC      120
CTGGGAAGGC AGGCCCAGAA CCCATTTTCT TGAATGTCAG TTCCGGGCTG TGTTACATG      180
ACTGCTGTCT AGCTGATGCA TTTTTCACAT TTSTCAACTC TGGTTAGAAA CAGTCTCTCA      240
GGAGTATTCT CTAACCTGAT ATTTTCTAAA AAGATATGTT GATTCAACTT TGTTTAGCAT      300
CCTACTTTCT AGATTGTGGG GCTCATTTTG CCAGGGCCAA GCTACCAGAA AAGTAGAAGT      360
GGAGATTACC TGGTATGTAT CTCTCTGGGT GCCCCAGTTA GAGCTGCCAC AGCTCAGGAA      420
AAAGATGAGG CATAACGACC TTGAATGTAA TTGGAGTAAG TGACAAAATA AGAACTACCC      480
TGGGAAACTC GAG                                         493

```

(2) INFORMATION FOR SEQ ID NO:656:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:656:

```

GAATTCGGCC TTCATGGCCT ACTTGGCCTT TGTGTGTGTT TGCCTTTGTC AGTCTCCTGC      60
CTCTGGATGG GTTTCGTGTT GTTTCCAAAC TSTCTGGGGC TGTGCACCAT GGAGACAGTG      120
TCCTGGGCTG CCTCTAGCCT GATCTGGTTA GAATAAGCCC CTCTCCTTTG CATGCGTCTC      180
CAACCTGACA TTTGGAGCAT CCAAAACAAA TCATGACATT CCCAAGTAAA GATAGAAACC      240
ACCGTCTCCA CTCCACTCGA G                                         261

```

(2) INFORMATION FOR SEQ ID NO:657:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 621 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:657:

```

GAATTCGGCC TTCATGGCCT AGATGGTCTC TGCTGCTCTT GCCTCTAGTT CATGGAGATG      60
TGTCTCTGTT CAGGCCAAGA TACAGCCAGC CAGGCCTGTC GTCTGGGACC CAGGAGGCCT      120
CTGATGACCA AGGGCTTTCA CATCCTAAGT CATTGGAAG GAGGCCTTGA GAACAAAGTC      180
ACCTTTGTCA CTCCAGTGA ACTGAATGAG GAACATGCTG TCTCCTGTCT TGGCCTCCCC      240
TTTCATGAGA TACTGGGGAG AAGAGAACAT TCCTCCTGGC TTAGTTGTAG CAGACCCAGA      300
CCTGTGCCCA GCTTTGGTCC CCCTTCCCAA CTTCTGAAGC ACGTGCTGCA GAGCCACCTT      360
GGTCTGAGCA CCTGAGGACC AGCCCCTCCT CCCTCAGTGC GGGTCATCTC TTGGGGGATT      420
TTCTTAAAGT GAAGAAAGGG GGTGGGGAAC CATATTGCCC CTCCCTCCCC CATCAAACCT      480
CCTTCATTTA ACTTGCTATA AAATGAGTCA TATAAAGAAA CTCTATATGG GTGAGGTATA      540
TCCCACTTCT GTGAAAACAT TACAAATCRA ACCGCTTCTC TCAGTTTATT TAAGATGCTT      600
TTGTTGCAAG CGGTACTCGA G                                         621

```

(2) INFORMATION FOR SEQ ID NO:658:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 567 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:658:

```
GAAGTCTTGG AGATTCTAG TTTATTCATT AACAGCAGAA GGATGGAAGA AAATTCCTCT    60
GGCAATACCA TGTGAGCCTC TTCGATGTTT AATACAGAAG AAAGAAAATG TTTCAGACT    120
CACAGAGTCA CGGTGCATGG GGTCCCAGGG CCAGAGCCCT TTACCGTTTT CACTATTAAT    180
GGAGGCACCA AGGCAAAGCA GCTTCTGCAG CAAATTCTGA CAAATGAACA AGACATCAA    240
CCTGTTACCA CAGACTATTT TTTGATGGAA GAAAAATATT TTATATCTAA AGAAAAGAAT    300
GAATGTAGGA AACAAACATT CCAGAGAGCC ATTGGTCCAG AAGAGGAGAT CATGCAAATT    360
TTAAGCAGCT GGTTCACAGA AGAGGATAC ATGGGCAGGA TTGTCTTAAA AACCCAGCAG    420
GAAAACCTAG AAGAGAAAAA CATTGTTCAA GATGACAAAG AGGTGATCTT GAGCTCAGAG    480
GAGGAGAGTT TCTTTGTCCA AGTGCATGAT GTTCTCCAG AGCAACCTCG AACAGTCATC    540
AAAGCACCCC GCGCCAGCAC ACTCGAG    567
```

(2) INFORMATION FOR SEQ ID NO:659:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 388 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:659:

```
GAATTCGGCC TTCATGGCCT AGGCCCTTTG GCCCTGGGGT GGGGGTGCTT ACTACATCCC    60
TGGAAGGTGC AGGGAGGCTG ATGGCCTTGA TCTCTAACAC AAACAGGAAC CAGCTTCCTC    120
CCTCCCCCAC CTGGGTTTCC CAGGGCCTCC GGTGTGAGA TCCTCCCCCA CTGAGTGCC    180
CCACCCGCTC CCCACAGAAG CCCGGAGAGT GGCTCTGTCA CCAGAGGTGT CATTTCACCA    240
CTGTCTGTGG GAGGTGAGTG AGCAGGGAAT GTGTGTGCTG GGTGTGGGAA CTCAGCCCCA    300
TCTAAGAGAA GATACTCTTG GCTTCCTCCC CCTCAGAGGA GCAGCCGCGT CCCTGGTCCT    360
TGTGCACTGA CAGTCCCGGA GTCTCGAG    388
```

(2) INFORMATION FOR SEQ ID NO:660:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 491 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:660:

```
GAATTCGGCC TTCATGGCCT AGCCAGGAGT TGAGGTGGAA GTCACCATTG CAGATGCTTA    60
AGTCAACTAT TTTAATAAAT TGATGACCAG TTGTAACTT CTGTTGGTTT TTATTCAGAA    120
TACTGGCAGA TTTTAGGAAT ATAAAGTGT ACTATGAGAC TTCCACTTTT CAGGTGGAAT    180
ATATGGGTAT CTTAGAGTGG TCTATCCTGT TTTCTGTGTC GTTTGAGTCA TTTGAAAAC    240
GGATTCCGTT AACTACATAA TATGTGAGAC CTGACTGGTT TTATTGGACA CTGGCAGTTT    300
ATAACTTTGG CATACTCTAG ATAAATCTTG ATTGGTATGG GGTGTTAAGG TTTCTGGGGC    360
GTTTGTAATG CACACCCATG GTTGAGAACC TAGTGCGCTA GTAGGCACGT GTTAAAAAGC    420
TAGTAATAA TATTTTAA TTAACCAAGT TTAACGTCCT TAAAAAGGA TTAAGTGCA    480
AGGACCTCGA G    491
```

(2) INFORMATION FOR SEQ ID NO:661:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:661:

```

GAATTCGGCC TTCATGGCCT ACCTCAATAT GCTATCAGAT TCTGAAAATT CCCAGCATCT    60
GGAAGTTTAT GAGCCACCAA AAGCTGTGGA TAAGGCGAAA TCCCAGGGG TTGATCCTAA    120
GCAGTTGGCA GCAGAACTCC AGAAGTTTC ACTACAGCAG TCACCGCTGG TTCTGTATC    180
AGTTGTTGAA AAAGGATCTC ATGTTTCATC AGGTCCTACA TCAGCAGGAT CCAGTTCCTG    240
TCCCAGCCCT GGGCAACCAG GGTCCCCCTC AGTGAGCAAA AAGAAGCAGC GCAGCAGCAA    300
GCCACTCGAG                                     310

```

(2) INFORMATION FOR SEQ ID NO:662:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 404 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:662:

```

GAATTCCTAT GGCCTACTTC CGGCGCAAGT GGCTTCTGAT AATCATGGCG CCCCTCGGAA    60
CAACTGTATT GCTGTGGAGC CTCTTGAGGA GTTCTCCGGG CGTGGAAACGG GTCTGTTTCC    120
GGGCTCGAAT CCAGCCCTGG CACGGTGGCC TGCTCCAACC GCTACCTTGC TCTTTCGAGA    180
TGGGGCTGCC ACGCCGCGG TTCAGTCCG AGGCCGCGAGA ATCTGGTAGC CCAGAGACCA    240
AGAAACCTAC ATTTATGGAT GAGGAAGTTC AAAGCATACT CACGAAAATG ACAGGCTTGA    300
ACTTGAGAA GACTTTTAAG CCAGCTATAC AAGAACTGAA GCCACCAACC TATAAGCTAA    360
TGACTCAGGC ACAGTTGGAA GAGGCTACAA TACAGGCTCT CGAG                                     404

```

(2) INFORMATION FOR SEQ ID NO:663:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 224 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:663:

```

GAATTCGGCC TTCATGCCTA ATTTGTGTGA TGGCCAAAGA GTTCTTATCA GAAGTGGCAA    60
AAACTACATA CAGGTTGGCT TCCAATAACA TGAGCCAGGT ATTTTTCAGT AATATTTTGA    120
AGTGTCTTTT CTTTCTAGAC ATGCACATGA TGGTGTCCAA GCCAGAACAG TGGGTAAAGC    180
CAATGGCTGT AGCAGGAGCC AATCAGTACA CCTTTCATCT CGAG                                     224

```

(2) INFORMATION FOR SEQ ID NO:664:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 476 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:664:

```
GAATTCGGCC TTCATGGCCT AGGTCTACCA AAGTGAGGAC ATTACTGCAG ATATTCTTCT    60
CCTTTTCTCC TACATTATCA TTTCTCTTTT ATAACATCAT TTCTGCAGAT ATGTAAAAAT    120
ACATCCCATC TTCAAAAAGA AAAACAAAAA TCTGACTGTA CTTCATATCC CCTTCTAGAC    180
ATTGCCACAT TTCTCTACTT CTGTTTACAA CAAAACTCCT GGAAAGATTT GTCTATACTG    240
GCTTTCTCTA CTTCTTTTAC TTCCATTCCCT TTCCTAACCA CTCTAAACAT GCTTGGGTCC    300
CCACCACTGT AACAAATATA ATTTGTGTCC AATAACCAGT GATCTCTGTA TCACCGTTTC    360
CAAGGGTGAG ATCTCAGACT TCACCTTTCT GGATTGATTG ACACATTGGA CTCAGTTGGT    420
TACTCCTCAC TTCTTGAAC TGTCTTCACT GGGCTTTTGG GACTCCATAT CTCGAG      476
```

(2) INFORMATION FOR SEQ ID NO:665:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:665:

```
GAATTCGGCC TTCATGGCCT ACTCTCTACT CCTTTGTGCT CAATTTCAT TGTGGAATTC    60
TGCATATATG ATCTTGTGGC ACATTTCTAC ATTTCTCAG CCCAGAAGGC CTTCCCTGTT    120
CACTATCTCC TTCTTTTAC TAACCTTAC TATATTTCCA GGCACAGTTC AGGCATCAGA    180
TAGCCCTATT TGTTCAACT TTCACCGTAG GTCAGATTAT AAGCCTTGCA ATCTCGAG    238
```

(2) INFORMATION FOR SEQ ID NO:666:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:666:

```
GAATTCGGCC TTCATGGCCT AGACCATTTT CATTGTTTAT AGTTTATTTT TTATAAATAG    60
TGCTTTCTGG AATATCCTTA AATACCTCTA TCTTTTAAAC ATCCTTGTGT ATACATCTTT    120
TCTCACACTT GGCTTCCTCT TCGAATAGAA TCTCCTGGAA ATTAGATAGC TGAGGTAAAA    180
GTCCCTGAAC CTTTACAAA TTGCTACACA ATAAATACCA AACTGATTTT CAGGAATGTA    240
GTCCCATCAA CAGTGTGCTT GTTTATCCAT ATCGTTGCTG ATCTGAGTTT TGTCACTCTA    300
TTGATTCTTA CCAATCTGCC AGTATCATAG ATTTTAAAT ATTTTGTG TGCATCTCGA    360
G                                                                    361
```

(2) INFORMATION FOR SEQ ID NO:667:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:667:

GAATTCGGCC TTCATGGCCT ACTCATACAC AATGAATACA AAAACTGGAA CTCTGCAATT	60
TAATACTGTT TCCAACTGG AACTGGAGA ATATTCCTGT GAAGCCCGCA ATTCTGTTGG	120
ATATCGCAGG TGTCTCTGGA AACGAATGCA AGTAGATGAT CTCAACATAA GTGGCATCAT	180
AGCAGCCGTA GTAGTTGTGG CCTTAGTGAT TTCCGTTGT GGCCTTGGTG TATGCTATGC	240
TCAGAGGAAA GGCTACTTTT CAAAAGAAAC CTCCTTCCAG AAGAGTAATT CTTATCTAA	300
AGCCACGACA ATGAGTGAAA ATGATTTCAG GCACACCCTC GAG	343

(2) INFORMATION FOR SEQ ID NO:668:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 266 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:668:

GAATTCGGCC TTATCTACA ACTTTGAATA GACATAAGAG TGCCTGTCTG CATAAACCTT	60
CATCAACATT GGTATTATCT TTCTTTTCA TCTTTGCTAA TTGGATAAGT TTTAAAAAGT	120
GTAACACATT TTAGTTTGA TAGCTTTGAT TATAAGTGAG GTTCGACATT TTTTTCATT	180
TCITTACACT TTAATAAATC TAACCGTGGC AACGTTTGA GGTGTGTGTT CTTCTTATGT	240
TGCTGAGTGT TATTTACTCC TGGACG	266

(2) INFORMATION FOR SEQ ID NO:669:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 452 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:669:

GAATTCGGCT TCATGGCCTA CAAAAAGAA ATTAAGAAGC TCCTAAAGAC GCAAAGAAAT	60
CATCTACTCC TCTGTCTGAA GCAAAAAAAC CAGCTGCTTT AAAACCAAAA GTACCCAAGA	120
AGGAAGAGTC TGTCAAGAAA GATTCTGTTG CTGCCGAAA GCCAAGGAG AAGGGGAAAA	180
TAAAAGTCAT TAAGAAGGAA GGCAAGGCCG CAGAGGCTGT CGCTGCAGCT GTCGGCACTG	240
GAGCCACCAC AGCAGCTGTC ATGGCGGCAG CTGGAATAGC AGCCATTGGC CCTGCCAAAG	300
AACTCGAAGC TGAGAGGTCC CTTATGTCAT CTCCTGAGGA TCTAACCAAG GACTTTGAAG	360
AGTTAAAGGC TGAAGAGGTC GATGTAAACA AGGACATCAA GCCTCAGCTG GAGCTAATCG	420
AAGACGAAGA GAACTGAAG GAAAACTCG AG	452

(2) INFORMATION FOR SEQ ID NO:670:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 284 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: dcuble
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:670:

GAATAATTGA CTGAAAGTGT AGTGTGAGT GGTAGAATAA GTGCTGATCC TGGGGTCTTA	60
TACCAATGTT GCTAACTGTG AGCAGCCTTT GTCAAATCAC TTGGCTTCAT TTTCAGTGGC	120
CTAAGAGTAA TAGGTTTAAT TATTTCCATA ATTCCTTTAA GTTTTACAT TTTCTGAGTT	180
CATCTTTTGT GTTTTTCCTG GCATTTTACT ATTCTCTTTT CCTGCTTTTG GCTATTTTCT	240
CAACAGGTCC ACGACTGGAA TTTGAAAGCA AGAAACATCT CGAG	284

(2) INFORMATION FOR SEQ ID NO:671:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 235 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:671:

GAATTCTGGA AGCAGCCTAT CATCGCTCCG TGTGCCCTCC ATACACAGCG TTTGTGTGTG	60
TTATGCCAAA CTGCTTGGTG TTTTCCAACC GTGGACCATG ATATCTCACT TCCTTAACCT	120
TACCTTCATA TGCTTTTCCT TTGTGTCTTC TTCTGAAATG CTTCTTCCTT TTGTCCAGGC	180
TGACTCCTGT TTGTCTGAGA CATGTGTCTC AGGAAGCCTT TCCGTTCCTC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:672:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 370 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:672:

GAATTCGGCC TTCATGGCCT AGCATTGATG GCCCATGTAG AAGACCTGAT CATTAAGACT	60
ATAATCTCTG CTGAAGTAGC TATTGCTACT GCCTGTAAAA CCTTTGTTC TCATCGCAGC	120
AGTTGTTTGG AACTCTATGG CTTTGACGTG CTCATAGATT CTACTCTGAA GCCATGGTTG	180
TTGGAAGTGA ATCTCTCTCC TTCTTTGGCC TGTGATGCGC CTCTGGACCT AAAGATTAAA	240
GCCAGTATGA TTTCAGATAT GTTCACTGTT GTAGGATTG TGTGCCAAGA TCCTGCCAGC	300
CGGGCATCAA CTCGGCCAAT TTATCCCACC TTTGAGTCTT CCAGGCGAAA CCCTTTCCAG	360
AAACCTCGAG	370

(2) INFORMATION FOR SEQ ID NO:673:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 295 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:673:

GAATTCGGCC	TTCATGGCCT	ACACAGACAT	CATCATGCAG	AAGATGACCA	TTTCCAACAT	60
GGAGGCAGAT	ATGAATAGAC	TCCTCAAGCA	ACGGGAGGAA	CTCACAAAA	GACGAGAGAA	120
ACTTTCAAAA	AGAAGGGAGA	AGATASTCAA	GGAGAATGGA	GAGGGAGATA	AAAATGTGGC	180
TAATATCAAT	GAAGAGATGG	AGTCACTGAC	TGCTAATATC	GATTACATCA	ATGACAGTAT	240
TTCTGATTGT	CAGGCCAACA	TAATGCAGAT	GGAAGAAGCA	AAGGAAGTAC	TCGAG	295

(2) INFORMATION FOR SEQ ID NO:674:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 156 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:674:

GAATTCGGCT	TCATGGCCTA	CCTGCCTCGA	GTGATGGGTA	TCGGGATGGG	TATCGGGATG	60
GCCACGCGCG	GGATATGGAT	CGATATGGTG	GCCGGGATCG	CTATGATGAC	CGAGGCAGCA	120
GAGACTATGA	TAGAGGCTAT	GACTCCAGCA	CTCGAG			156

(2) INFORMATION FOR SEQ ID NO:675:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:675:

GAATTCGGCC	TTCATGGCCT	AATAATTGT	AAGTTAAAT	AAGTAATACA	AATTAATGC	60
AAATCAAATG	CCTGAAGAAG	AAGCAGCAAT	ACCTATTTTG	AAATCTGCTG	TAGCCGAGAC	120
AGCTTCTAAA	TCTCCCACTT	GGGTTCTGTT	TCTGGAAGGT	GTGGGTCCTG	TGGTAGCTGG	180
AGTGTGGTG	GCCATCTTGG	TGCTGGCGGT	CCTCATGCTG	ATGTACTACT	GCTGCAGACA	240
GAACAACAAA	CTTGGCCAAC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:676:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 123 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:676:

GAATTCTGGA	TCAAACAGA	GGAAATGGT	GGAATTCTT	GTATAGATAC	AGTCTAACAT	60
AGAAACCCAT	GCCCATCAGC	AGTAATTCC	AGTCCCCAG	TCCTCCAAGC	CCTGGTACTC	120
GAG						123

(2) INFORMATION FOR SEQ ID NO:677:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 243 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:677:

```
GAATTCAGAG ATAAAGCTAA AGTTCATTT GAGCACCAGC CCAAATCCTG GACTTCTTTC      60
TGCTCCTCCT CAGAGGTTCT CTGGTTATAA GTTTTATGTG TATCTTGCCA GAATTTTTC      120
TATGTTATTA ATACAAATAT ATGTAGCCAC AGAAATTATA GCGTGTCATT CAGCCTTTGG      180
TTTTATTGCG ATTGATAGTA TTATGTCCAT ATCACTCTAC AACTTCTTAG GCCATGAAGG      240
CCG                                     243
```

(2) INFORMATION FOR SEQ ID NO:678:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 121 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:678:

```
GCGATTGAAT TCTAGACCTG CCTCGAGACC ACCTATGGAA GCCAAGTGT CCCGGGCCAT      60
GAGACCTGCC CAATCAAGCA GAAACACATT TGGAGAGACA AACATCAGC ACACGCTCGA      120
G                                     121
```

(2) INFORMATION FOR SEQ ID NO:679:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 283 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:679:

```
GAATTCTAGA CTGCCTCGA GTACCTGATC TTTTACTGTC TCTATAGGTT CATCTTTTTC      60
TTCCCTTTGT TAATTCTACT TTTTAGTTTT TTTGCTAGAT TTTTCTTGCA ATTGGATAGG      120
CCCATTTAAC CTATTTTGCC TCCACTCTAA ATTCAGTACT CCAAGAATTG GTTCACTCT      180
TCCAAATTTT GTATATAAGC CAGAGTTCTG CATAAAGGAA AATACTTAAA TTCTTTCTAA      240
TCTAATGTGG TTTCTGCAT CTTTCAGGAA ACTTTTCCTC GAG                          283
```

(2) INFORMATION FOR SEQ ID NO:680:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 373 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:680:

```

GAATTCGGCC TTCATGGCCT AGGGTTTGTG GCTAAAAATT ATGCTTAAGA ACACATCTAA      60
CAAACCTAAA GCTGCAAAGA CATAATGTTA ATGTAGGTGA AAATTTCACT TGTGTTTATT      120
CTGATAGACA AAATGTATT TTAGATGAGA AGCAACAATT TTCATGTTGT ACTGAGATTG      180
TTAGTAATGA AATACTTCCA AATATTAGTG ATGGTAGAAA TCTAGTGTAG GGCTCTTTGC      240
TGAGAAGGGA AAAAAGTCAC ATAAGAAATC TACTTTTCAG TAAACTGCAA ATATGTGTGC      300
TTCAACCTAT AACATATTCT GTCACCTTGA GCTTGTCATA TTGACAGAGA ATGAAAACCT      360
GATAAGACTC GAG                                     373

```

(2) INFORMATION FOR SEQ ID NO:681:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:681:

```

GAATTCGGCC TTCATGGCCT AGAGCGACTT CGACACCATG CCAGACATTG AGAGTGATAA      60
AAACATCATC CGGACCAAGA TGTTCTTTTA CCTGTCAGAT TTGTCCAGGA AGGACCCGAG      120
AATTGTCAGC AAAAAATATA AAATTTATTT TTGGAACATC ATCACCATTG CTGTGTTTTA      180
CGCGCTGCCC GTGATCCAGC TGGTCATTAC CTATCAGACA GTAAGTGCTA AACCTAGCCC      240
CAAACCCCTC GAG                                     253

```

(2) INFORMATION FOR SEQ ID NO:682:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:682:

```

GAATTCGGCC TTCATGGCCT AATCGAGGAG AATGGAGACC AAACCTGTGA TAACCTGTCT      60
CAAACCCCTC CTCATCATCT ACTCCTTCGT CTTCTGGATC ACTGGGGTGA TCCTGCTGGC      120
TGTGAGATC TGGGGCAAAC TTAATCTGGG CACCTATATC TCCCTTATTG CCGAGAACTC      180
CACAAATGCT CCCTATGTGC TCATCGGAAC TGGCACCCT ATTGTTGTCT TTGGCCTGTT      240
TGGATGCTTT GCTACATGTC GTGGTAGCCC ATGGATGCTG AAACCTGTATG CCATGTTTCT      300
GTCCCTGGTG TTCCTGGCTG AGCTCGTAGC TGGCATTTC AAGGTTTGTGT TTCGTCATGA      360
GATCAAGGAC ACCTTCCTGA GGACTTACAC GGACGCTATG CAGACTTACA ATGGCAATGA      420
TGAGAGAATG CTCGAG                                     436

```

(2) INFORMATION FOR SEQ ID NO:683:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:683:

```

GAATTCGGCC TTCATGGCCT AGTCCCCACT TTATCTCTTT AAACGGTTTC TTTTCTTTT    60
TTTTTTTAA GACCTCTCAG GGATGAAACA TTTTATTTT TAACTAGTT TTTTCTTTAA    120
ATAACATTAA CACATGCTGA ATGCTTAAAT CTTTCTAGAA TTCAGAAAGG TAAATGAAA    180
GTCACCATTG TCATTCTCAT CATCTTACTC CCAGAGATGA TTGTTATTAA TATTTCCAGA    240
AATTTTGCTT GTATATGCAA ACAGCAATAT ATTGTAGCTG CTCGAG                    286

```

(2) INFORMATION FOR SEQ ID NO:684:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:684:

```

GAATTCGGCC TTCATGGCCT ACCCTTACCA GATACTGAAT CTGCCAGTGC CTTATTTTGG    60
ACTTCTCAGC CTCTGGGCT GGGTGAGGTG GTTCACTACC AGCCTTGGCA CCATAGTGAG    120
ACTCCCATCT CTACAAAAA AAAAAAAAAA AAACCTTCTG TTGTTGTAA GCTACCCAGT    180
TTATGGTATT TTGTACAGC AACCCAAACA GTCTGAGACG TTAGCTTAA CTCCTGTATG    240
CACTAGATAC AGTCTGCACT TTGACATCAA TCTCGA                    276

```

(2) INFORMATION FOR SEQ ID NO:685:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 155 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:685:

```

GAATTCGGCC TTCATGGCCT ACTAAGAATA GGAAAAAAAA TAACACTATG ATACCACAAC    60
CTTATTACAT CAAACTGCTT TGGGCTTTAT CCTCTTTAAA GTGTGCTCAG GTGTTACGCC    120
ACGAGGTTTC TGACAGCCCT CATAAGACCT TCGAG                        155

```

(2) INFORMATION FOR SEQ ID NO:686:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:686:

```

GAATTCGGCC TTCATGGCCT ACTTTGAAGA GTACGATTTC AAAACCAGCA ATTGGTGTGA    60
ATGCAAAAAC ATTTGTTGGC ACCATTATT TAAAAAAA AAAAGCTGTA TGCAGCAGAA    120

```

```

AGCCTTATAC AAGTTGTTTT TCTTTTTTTC CTTTTTCTTT TTTTGGTAC CTTCAATTCT 180
GTTACTTTTA TATAAAATTC TCTGCAAAGG AAGGCCTCTC TTTGGACTAC AATTGGAGG 240
CAGCCACTTG TTGTCCTGC TTCTGTTAAA GAATGTGGAT ATCAAGCCCC CCCGACTCGA 300
G 301

```

(2) INFORMATION FOR SEQ ID NO:687:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 254 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:687:

```

GAATTCGGCC TTCATGGCCT AATTTTACA GAAATTATTT CCACAATCAG AAGTACTGTA 60
CTGATTGCAT TTCTTTGTCT CAAAAAGTTT TCCTTATGTT TCTCAAAGCA GTATTTACAC 120
TAATTATTCA ATTCTTATCT TTCTTTCAGT TTTCTCCAAT AGACTGTGAG ATCTTTGAGG 180
GCCAGGTTGA CATGTCTCTG ATACCTACAC CCTATGCAGC TCCTAGTGCA GGACCTTGCA 240
GTGACAAGCT CGAG 254

```

(2) INFORMATION FOR SEQ ID NO:688:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 261 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:688:

```

GAATTCGGCC TTCATGGCCT AATATTTATT TAGATGCTAT TATTACTGTT TGGACTTTTA 60
TTTGGGCAGG CTTGTGTTCA GACTGTAGGG TTTTCCAATG TGACTAATGA CCACTCCTGC 120
CTCTCCCGTG GTGTATTTTG GGCACCCTCC CACCCGGCTG CATACCCGGC CAGGGCTCCC 180
ACAGAGACAA GGAGGGCACA GGTGTCTGCC CCTCTTTGA AATCGATATA CACACATCCA 240
CGCACATGCG GCCCACTCGA G 261

```

(2) INFORMATION FOR SEQ ID NO:689:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 214 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:689:

```

GAATTCTAGA CCTGCCTCGA GCTTCTGGCT GTTGTCTTTG CTGGGCATCC TTTTACAAG 60
TGGAAGAAGT AGGATGGCTT TCCAAAGTCT TCTAGAAATG AAGTCTTTTC TCTGTGCAGC 120
TTTCCCCCTT GGAGCAGGAG TGAAGATGTT TCATTATCTT GGGCCTGGGA AACCACTTCC 180
CCAGGCTTCT CCTCCCCC ACCCCCGACT CGAG 214

```

(2) INFORMATION FOR SEQ ID NO:690:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:690:

```

GAATTCGGCC TTCATGCCTA CAAACTTAAA AGTAAATCTT TGGAAATCAG ATAGTAGTCT      60
TGAAACTATG GAAAACACAG GAGTGATGGA TAAGGTTTCC GCAGAGTCTG ATGGGGACAT      120
GTCTTCAGAT AATGACTCAT ACCACTCTGA TGAATTCCTT ACAAATCTA AGTCTGATGA      180
AGACAGGCAG CTAGCTAACT CATTAGAGAG TGTAGGGCCA ATAGATTACG TTCTTCCTAG      240
TTGTGGTATT ATTGCCTCAG CGCCTCGATT GGGCAGTCGG TCCAGTCTC TTAGCAGCAC      300
ACTCGAG                                         307

```

(2) INFORMATION FOR SEQ ID NO:691:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:691:

```

GAATTCGGCC TTCATGGCCT ACTCCATATT TATTTAGATG CTATTATTAC TGTTTGGACT      60
TTTATTTTGG CAGGCTTTT TCCAGACTCT AGGGTTTTCC AATGTGACTA ATGACCACAC      120
CTGCCCTCTC CGTCGTCTCT TCTGGGCACC CTCCCACCCG GCTGCATACC CGGCCAGGGC      180
TCCCACAGAG ACAAGGAGGG CACAGGTGTC TGCCCCCTCT TTAAATCGA TCTACACACA      240
TCCAGGCACA TCGGACCCCG AGGAAACGAA ACCCACTCTA GAAAACGCGA CCTTGCCCGC      300
ACCTAAAGCA GCCAGCCGTG AGTGCAGACC CCTTGGCCAG CGTGGCGCAG TGGCCCTGAG      360
CAGTAGTGGC GTGTGTGTAG ATCAAGTCGG ATCTAGTCCA GCTCGGTTCA TTAGCGATCC      420
ATGTAATCTG ACCTCATCTT GTCTCGAAGT CTCTTTTTTT GGCCCAGGCC TTGAAGAATA      480
CACTGGACTC GAG                                         493

```

(2) INFORMATION FOR SEQ ID NO:692:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 225 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:692:

```

GAATTCTAGA CTGCCCCCTG CCTCCTGCAT CCAGCCCCCA ACATGGTGCC AAAGCTTCCA      60
GAAGCCAAAA AGCTTCTGAT TTTTAAAGTA GTGGGCATCT CTCTCCTAAT GACGAAGCTG      120
CTCAGCAACT CCACCTGCCC GCCGCAGGAA GGAGCAGTCC CTTGCTATCC CTGCAGCCAC      180
TCCAGCACA CCCGCACACA GCCAGCACCA CCGCCCACTC TCGAG                                         225

```

(2) INFORMATION FOR SEQ ID NO:693:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:693:

```
GAATTCGGCC TTCATGGCCT ACTGGCTCAT ACAATACATC AATAAGTATG CAACTTTTCA      60
TTTGTTATTT CGTTGCTGGA AGTGGGAAAT ACCCCATCTT CCCAGGAGTG AAATGGTTCT      120
ACTTTCTCTC CGTGGTGCCC TGTATCATT A CTCAGCTCTG CTGCTGCTCT CCGCAGCCCC      180
TAAAAGTAGC ATGGATCGGG GAAGAAGGAA GGACGGCAGG AAGGCAGGCA GAGATCCTCA      240
GGCAGGTCGA G                                     251
```

(2) INFORMATION FOR SEQ ID NO:694:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 294 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:694:

```
GAATTCGGCC TTCATGGCCT AGTGTGTGTG TGCCTGTGTG TGTGTTTACA TATAAAGTTT      60
TTTGTTAACA AATAAATTTT GTTAGAGCTA GTCAGATTTT TGTGCTTA ATCTGCTAGT      120
TTTGGTAGGT TATATTTTTC AAGGAATTTG TCCATTTTAC CTATGTTGTT GAATTTTGGG      180
TGTAACGTTT TTCATTACTC TTTTCTTTT AATATCTGTG GGATCTGTAA TGATGCCCCC      240
TCTTTCATTC CTGATATGAG TAATCTTAT TCTCTTTTTC TCTATCAGCT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:695:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:695:

```
GAATTCGCCT TCATGGCCTA ATTGGGACCA AATAGAGGCT CACAGATATT TGGATTATTT      60
TATGTGCTTA TTATTAATA AGGAAAGCAT TTTGTGATAT GTGGAAGACG CTATGTGAAG      120
TTTTACCTAT CTTCTCAAAG ACCTTTTCTT TTGTATTTTC TTTTGGTGTT TCTTAAAGCC      180
AAACAAAGAA ATGTTCTTAA GGAGACAGGG TGGGTTTTTC TGTGGGCCTA GGCCATGAAG      240
GTCGAG                                     246
```

(2) INFORMATION FOR SEQ ID NO:696:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 349 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:696:

```

GAATTCGGCC TTCATGGCCT ACCCTAATAT AAAAAGCATT GTCACCATGT TGATGCTGAT      60
GCTATTGATG ATGTTTGCTG TCCACTGTAC CTGGGTCACA AGCAATGCCT ACTCTAGTCC      120
AAGTGTAAGT CTGGCCTCAT ACAATCATGA TGGCACCAGG AATATCTTAG ATGATTTTAG      180
AGAAGCTTAC TTTTGGCTAA GGCAAAATAC AGATGAACAT GCACGAGTAA TGTCTTGGTG      240
GGATTATGGC TATCAGATAG CTGGAATGGC TAATAGAACT ACGTTGGTGG ATAATAACAC      300
CTGGAATAAC AGCCACATAG CACTGGTGGG AAAAGCTATG TCTCTCGAG      349

```

(2) INFORMATION FOR SEQ ID NO:697:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:697:

```

GAATTAAATA AGTTACTGAC TTTGTGACTT ATTTAATTCA TATTAATATA TTAGGCTTCC      60
CAACTGACGG TGTGTCAGTT GAGCTAGCTT CCAGTTTGG AGAAACACAT AGTTGATTAG      120
TTCTGTCAGT AATTTTCAGG GATATTAATA TAACTTTGAT ATTAGTGAGA AATTTTCTTT      180
CAGTAGTAAA ATGTTTCTA ACTTAGGAGC TGTCTCGAG      220

```

(2) INFORMATION FOR SEQ ID NO:698:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:698:

```

GAATTCGGCC AAAGAGGCCT AGCAGAGCTT TCATATCCAC GATGCGTTTT CTGGCCGCCA      60
CGATCCTGCT GCTGGCGCTG GTCGCTGCCA GCCAGGCGGA GCCCTGCAC TTCAGGACT      120
GCGGCTCTAA GGTGGGAGTT ATAAAGGAGG TGAATGTGAG CCCATGTCCC ACCGATCCCT      180
GTCAGCTGCA CAAAGGCCAG TCCTACAGTG TCAACATCAC CTTTACCAGC GGCACTCAGT      240
CCCAGAACAG CACGGCCTTG GTCCACGGCA TCCTGGAAGG GATCCGGGTC CCCTTCCCTA      300
TTCTGAGGCC TGACGTTGT AAGAGTGGA TCAACTGCCC CAGTACAGTC GAG      353

```

(2) INFORMATION FOR SEQ ID NO:699:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:699:

```

CCGATTGAAT TCTAGACCTG CCTCGCTTCC CCACCCTTAC TAACATTAAC GAAAATAACC      60
CCACCCTACT AAACCCCAT TAAAGCCTGG CAGCCGGAAG CCTATTGCA GGATTTCTCA      120
TTACTAACA CATTTCCTCC GCATCCCCCT TCCAAACAAC AATCCCCCTC TACCTAAAAC      180
TCACAGCCCT CGCTGTCACT TTCTAGGAC TTCTAACAGC CCTAGACCTC AACTACCTAA      240
CCAACAACT TAAAATAAAA TCCCCACTAT GCACATTTTA TTTCCCCAAC TCCTCGAG      298

```

(2) INFORMATION FOR SEQ ID NO:700:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 370 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:700:

```

GAATTCGGCC TTCATGCTTA GCCTCAGCTC TTTCTTCTGG GTTGTTTGTA TTTTCTTTTC      60
TGTCCTCAAC AGTTTCCCC ACAAAAAGAA CTTTATGTCT TTCTCTGTCT TCCCTCAGTC      120
CTTCCAGTCA GCAGCCTGTG ATTGGGCTTT TCCCCTCAGA AACGAACAAT CCAGAACCCA      180
CTGTTTAAAA CAACTGTATT TTGCCTTGGG AAGTCCCAT TGCCTCCCTG AAAACATTAA      240
ACATTCCTCC GATCCCCAGC CTGAGTCTCT CTGTCTCTGG GCCCATCCTT GCTCCACAGC      300
AGGGCTGGTG TGTCAGCAC AGAGTGACCC TCCGATGCC TTTCCCAACC GCCGCCCTGC      360
CTCCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:701:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 515 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:701:

```

GAATTCGGCC TTCATGGCCT AGGAAAGATC TAATTATCAT GGACCTGCGA CAGTTTCTTA      60
TGTGCCTGTC CCTGTGCACA GCCTTTGCCT TGAGCAAACC CACAGAAAAG AAGGACCGTG      120
TNCATCATGA GCCTCAGCTC AGTGACAAGG TTCACAATGA TGCTCAGAGT TTTGATTATG      180
ACCATGATGC CTTCTTGGGT GCTGAAGAAG CAAAGACCTT TGATCAGCTG ACACCAGAAG      240
AGAGCAAGGA AAGGCTTGA AAGATTGTAA GTAAAATAGA TGGCGACAAG GACGGGTTTG      300
TCACTGTGGA TGAGCTCAA GACTGGATTA AATTGACACA AAAGCGCTGG ATTTACGAGG      360
ATGTAGAGCG AAGTGAAG GGGCATGACC TCAATGAGGA CGGCCTCGTT TCCTGGGAGG      420
AGTATAAAAA TGCCACCTAC GGCTACGTTT TAGATGATCC AGATCCTGAT GATGGATTTA      480
ACTATAAACA GATGATGGTT AGAGACGTTT TCGAG

```

(2) INFORMATION FOR SEQ ID NO:702:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:702:

GAATTCGGCC	TTCATGGCCT	AGGGGACCTG	ACGTTCACTG	TGGCCCAAAA	GATGGCTGAG	60
CCAGAGAAGG	CCCCAGCCCT	CAGCATCCTG	CTGTACGTGC	AGGCCTTCCA	GGTGGGCATG	120
CCACCCCCTG	GGTGCTCGAG	GGGCCCCCTG	CGCCCCAAGA	CACTCCTGCT	CACCAAGCTCC	180
GAGATCTTCC	TCCTGGATGA	GGA CTGTGTC	CACTACCCAC	TGCCCGAGTT	TGCCAAAGAG	240
CCGCCGCAGA	GAGACAGGTA	CCGGCTGGAC	GA TGGCCGCC	GCGTCCGGGA	CCTGGACCGA	300
GTGCTCATGG	GCTACCAGAC	CTACCCGCAG	GCCCTCACCC	TCGTCTTGA	TGACGTGCAA	360
GGTCATGACC	TCAAGCTCGA	G				381

(2) INFORMATION FOR SEQ ID NO:703:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 327 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

GAATTCGGCC	TTCATGGCCT	AGCTCCACTT	TCTCTGAAAA	TTTATTCATA	TTGTTAATTA	60
AATTGTGTTT	TATTATAGAA	ATAATATATT	GCATGATTTG	TAAAAATGCA	GAGGAACAGA	120
ATGCCACAAA	ATTATGTAAC	CCTTTCTATC	TCCCCTGGT	GTACCTCCTT	AATCATACTT	180
CTCAGAACCA	TTGTCAATAA	TTTGCTGGGA	GTCTTCTGA	TGGTTACCAT	CGTGACTGAT	240
ASATTTATTT	CCCAGGTTCA	AGCGGTTCCC	CTGCCTCAGC	CTCCCGAGTA	TCTGGGACTA	300
CAGGCATGCA	CCACCACTCA	GCTCGAG				327

(2) INFORMATION FOR SEQ ID NO:704:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

GAATTCGGCC	TTCATGGCCT	TGCCTTTTTT	CTTTCACCAC	TTTACTACAC	ACAATTACTG	60
GATTAATCTC	TTTAATGCCG	AGATCTTTTT	TCCTTAGTGA	CACCTTAATC	ACTCTTAGCT	120
TAACATATAT	GGTCATCCAT	TACTGGGTTG	CCTCTGCCTT	TCCAGGATTG	GCTGCCACTG	180
CTCCTCCACA	TACCCTGTAT	TCTAGCCAAA	TGGAATCACT	GCTGTGTCCC	AAGCAGATTC	240
TTTATTTCTC	TTGGCTGTTG	CTCTCTATT	CTAATGCTAC	CTGCCCTTCA	AAACTCGAG	299

(2) INFORMATION FOR SEQ ID NO:705:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 494 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

GAATTCGGCC	TTCATGGCCT	ACTTGATTGG	TGGCTTATCT	CAAGTTACCA	TTTTTCAGTC	60
AAGTCTGTTT	GTTTGCTTCT	TCAGAAATGT	TTTTTACAAT	CTCAAGAAAA	AATATGTCCC	120

```

GAATTCGGCC TTCATGGCCT AGGGGACCTG ACGTTCACCTG TGGCCCAAAA GATGGCTGAG      60
CCAGAGAAGG CCCAGGCCCT CAGCATCCTG CTGTACGTGC AGGCCTTCCA GGTGGGCATG      120
CCACCCCCTG GGTGCTGCAG GGGCCCCCTG CGCCCCAAGA CACTCCTGCT CACCAGCTCC      180
GAGATCTTCC TCCTGGATGA GGA CTGTGTC CACTACCCAC TGCCCGAGTT TGCCAAAGAG      240
CCGCCGCAGA GAGACAGGTA CCGGCTGGAC GATGGCCGCC GCGTCCGGGA CCTGGACCGA      300
GTGCTCATGG GCTACCAGAC CTACCCGCAG GCCCTCACCC TCGTCTTGA TGACGTGCAA      360
GGTCATGACC TCAAGCTCGA G

```

(2) INFORMATION FOR SEQ ID NO:703:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:703:

```

GAATTCGGCC TTCATGGCCT AGCTCCACTT TCTCTGAAAA TTTATTCATA TTGTTAATTA      60
AATTGTTTTT TATTATAGAA ATAATATATT GCATGATTG TAAAAATGCA GAGGAACAGA      120
ATGGCACAAA ATTATGTAA CTTTCTATC TCCCCTTGGT GTACCTCCTT AATCACTT      180
CTCAGAACCA TTGTCAATA TTTGCTGGGA STTCTTCTGA TGGTTACCAT CGTGACTGAT      240
AGATTTATTT CCCAGGTTCA AGCGGTTCCC CTGCCTCAGC CTCCCGAGTA TCTGGGACTA      300
CAGGCATGCA CCACCACTCA GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:704:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 299 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:704:

```

GAATTCGGCC TTCATGGCCT TGCCTTTTTT CTTTCACCAC TTTACTACAC ACAATTACTG      60
GATTAATCTC TTTAATGCCG AGATCTTTTT TCCTTAGTGA CACCTTAATC ACTCTTAGCT      120
TAACATATAT GGTATCCAT TACTGGGTTG CCTCTGCCTT TCCAGGATTG GCTGCCACTG      180
CTCCTCCACA TACCCTGTAT TCTAGCCAAA TGGAACTACT GCTGTGTCCC AAGCAGATTC      240
TTATTTTCTC TTGGCTGTTG CTCTCTATT CTATGCTAC CTGCCCTTCA AAAGTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:705:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 494 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:705:

```

GAATTCGGCC TTCATGGCCT ACTTGATTG TGGCTTATCT CAAGTTACCA TTTTTCAGTC      60
AAGTCTGTTT GTTGCTTCT TCAGAAATGT TTTTACAAT CTCAGAAAA AATATGTCCC      120

```

```

AGAAATTGAG TTTACTGTG CTTGTATTG GACTCATTG GGGATTGATG TTACTGCACT 180
ATACTTTTCA ACAACCAAGA CATCAAAGCA GTGTCAAGTT ACGTGAGCAA ATACTAGACT 240
TAAGCAAAAG ATATGTTAAA GCTCTAGCAG AGGAAAATAA GAACACAGTG GATGTCGAGA 300
ACGGTGCTTC TATGGCAGGA TATGCGGATC TGAAAAGAAC AATTGCTGTC CTTCTGGATG 360
ACATTTTGCA ACGATTGGTG AAGCTGGAGA ACAAAGTTGA CTATATTGTT GTGAATGGCT 420
CAGCAGCCAA CACCACCAAT GGTACTAGTG GGAATTTGGT GCCAGTAACC ACAAATAAAA 480
GAACTAGTCT CGAG 494

```

(2) INFORMATION FOR SEQ ID NO:706:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:706:

```

GAATTCGGCC CTTTCATGGCC TACTCCCGAG CTCTACTGAC TCCCAAAAGA GCGCCCAAGA 60
AGAAATGGC CATAAGTGGA GTCCCTGTGC TAGGATTTT CATCATAGCT GTGCTGATGA 120
GCGCTCAGGA ATCATGGGCT ATCAAAGAAG AACATGTGAT CATCCAGGCC GAGTTCTATC 180
TGAATCCTGA CCAATCAGGC GAGTTTATGT TTGACTTTGA TGGTGATGAG ATTTTCCATG 240
TGGATATGGC AAAGAAGGAG ACGGTCTGGC GGCTTGAAGA ATTTGGACGA TTTGCCAGCT 300
TTGAGGCTCA AGGTGCATTG GCCAACATAG CTGTGGACAA AGCCAACCTG GAAATCATGA 360
CAAAGCGCTC CAACTATACT CCGATCACC ATGTACCTCC AGAGGTAAC GTGCTCACGA 420
ACAGCCCTGT GGAAGTGAGA GAGCCCAACG TCCTCATCTG TTTCATCGAC AAGTTCACCC 480
CACCCTCGA G 491

```

(2) INFORMATION FOR SEQ ID NO:707:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:707:

```

GAATTCGGCC TTCATGGCCT ACCTTATCTT CTTAACCTTT CAAATACTTG CAGATATTTT 60
GCTTGGTGCT TCCCATCTAT TGCAATACCC CTTTAGATAA AGTCAATTCT TATCTAAAAT 120
CAAATTCATT TTATTGACA ATGTTTACAA ACAACCCAG GACGATAACA ATTACACTCT 180
CAATACTGGC ATCACACCTT CACAATTACA CTAACCCCAA CCTAGGCCAT GAAGGCCTCG 240
AG 242

```

(2) INFORMATION FOR SEQ ID NO:708:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 285 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:708:

GAATTCGGCC	TTCATGGCCT	AGACAGAATT	ACTGGGAACC	ATTTTCCAAG	TAGCCCACCA	60
CAAAGGTTGT	ATTTTGTCAA	ATTGAAGGAG	TCATCTGACT	TTCTTAATC	ATAAGCTACA	120
AATATAATAA	GCTACATTAA	TAGATTTTCT	AATATTTATT	TAACTTTGAA	TTTCTGGAAA	180
AAACCCAACT	TGGAATGAT	TTATCATCTG	AGCTTTGTTT	TTGGCTTTGG	TATGCTAATT	240
TTTGCTTAG	GATTTTATA	TCTATTTTAT	GAGTGGCACC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:709:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:709:

GCACGCCATG	GGAGAAAAAG	AAGAAGCCAA	AAAAACAGAA	GACAAGTCTT	TGGCAAAGCC	60
TGAAACTGAT	AAAGAACAGG	ACAGTGAAAT	GGAGAAGGCT	GGAAGAGAAG	ATATGGATAT	120
AAGTAAATCT	GCAGAGGAGC	CACAGGAAAA	AGTTGACTTG	ACTCTAGATT	GGTTAACTGA	180
AACCTCTGAA	GAGGCAAAAG	GAGGAGCAGC	ACCAGAAGGA	CCGAATGAAG	CTGAGGTCAC	240
TTCTGGGAAG	CCAGAACAGG	AAGTACCAGA	TGCTGAGGAA	GAAAAATCAG	TTTCTGGAAC	300
TGATGTCCAA	GATCTCGAG					319

(2) INFORMATION FOR SEQ ID NO:710:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:710:

GAATTCGGCC	TTCATGGCCT	AGACACATAC	AAAGATAAGG	CTTTGATAAA	ATTCAAGAGT	60
TATTTGTATT	TTGAGGAAAA	AGACTTTGTG	GATAAAGCAG	AGAAGAGCCT	GAAGCAGACT	120
CCCCATAGTG	AGATAATATT	TTATAAAAAT	GGTGTCAATC	AAGGTGTGGC	TTACAAAGAC	180
ATTTCTCGAG						190

(2) INFORMATION FOR SEQ ID NO:711:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 199 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:711:

GGATTGAATT	CTAGACCTGC	CTCAGTAAG	ACCCCTTTT	AAAATGACTC	CCACTGTCTA	60
TTCCACAGCC	GGTGTGCGGC	ATGCTGATTC	AATCCCCACA	ACAGCCCAGG	AGGTAGGCGC	120
CGTCCCATCC	TCCTTTACAG	GAGGGGAAAC	TGAGGTTTCA	GTGGTCAGAT	GGTCAGCTGC	180
CTCCAAGACC	ACGCTCGAG					199

(2) INFORMATION FOR SEQ ID NO:712:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:712:

```

GAATTCGGCC TTCATGGCCT ACCTGTACCT GTTTATACT TGCTTTTGCT TCAGCGTCTCT    60
GTGGTTGTCA ACAGATGCCA GTGAGAGCAG GTGCCAGCAG GGAAGACAC AATTGGAGT    120
TGGCCTGAGA TCTGGGGGAG AAAATCACCT CTGGCTTCTT GAAGGAACCC CCTCTCTCCA    180
GTCATGTTGG GCTGCCTGCT GCCAGGACTC TGCCTGCCAT GTCTTTTGGT GGCTAGAAGG    240
GATGTGCATT CAGGCAGACT GCAGCAGGCC CCAGAGCTGC CGGGCTTTTA GAACACTCCT    300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:713:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:713:

```

GAATTCGCCC TTCATGGCCT ACCCAATTCA GTTTCAGAG GAGGTGGAAC CTTCTGCAAC    60
CCAACAGGAG GCCCAATTG AGCCTCCAGT TTCTCCTATG GAGCATGAAC TTTCCATCAG    120
TGAGCAGCAG CAGCCAGTTC AGCCTTCTGA GTCTTCTAGG GAGGTGGAAT CTTCTCTGAC    180
CCAGCAGGAG ACCCCAGGTC AGCCTCCAGA ACATCATGAA GTCACAGTTT CACCTCCAGG    240
TCACCATCAA ACTCATCATT TAGATTCACC CAGTGTCTCT GTGAAGCCTC CAGACGTGCA    300
GCTCACCATA GCAGCAGAGC CTAGTGCAGA GGTGGGAACT TCTCTAGTCC GACCCCTCGA    360
G                                     361

```

(2) INFORMATION FOR SEQ ID NO:714:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:714:

```

GAATTCGGCC TTCATGGCCT ACCGAGATGG AAATAACCTA AGAAAAAGAG GGCATCCAGC    60
TCCATCTCCC ATTTGGCGTC ATGCTGCTCT GGGTCTGGTA ACTCTTTGCC TGATGTTGCT    120
GATTGGGCTG GTGACGTTGG GGATGATGTT TTTGCAGATA TCTAATGACA TTAATCAGA    180
TTCAGAGAAA TTGAGTCAAC TTCAGAAAAC CATCCAACAG CAGCAGGATA ACTTATCCCA    240
GCAACTGGGC AACTCCAACA ACTTGCCAT GGAGGAGGAA TTTCTCAAGT CACAGATCTC    300
CAGTCTTAAC CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:715:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 456 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:715:

```

GAATTCGGCC TTCATGGCCT AGGCAATATC AAGGTTTTAA ATCTCGGAGA AATGGCTTTC      60
GTTTGCTTGG CTATCGGATG CTTATATACC TTTCTGATAA GCACAACATT TGGCTGTACT      120
TCATCTTCAG ACACCGAGAT AAAAGTTAAC CCTCCTCAGG ATTTTGAGAT AGTGGATCCC      180
GGATACTTAG GTTATCTCTA TTTGCAATGG CAACCCCCAC TGTCTCTGGA TCATTTTAAG      240
GAATGCACAG TGGAAATATGA ACTAAAATAC CGAAACATTG GTAGTGAAAC ATGGAAGACC      300
ATCATTACTA AGAATCTACA TTACAAAGAT GGGTTTGATC TTAACAAGGG CATTGAAGCG      360
AAGATACACA CGCTTTTACC ATGGCAATGC ACAAATGGAT CAGAAGTTCA AAGTTCCTGG      420
GCAGAAACTA CTTATTGGAT ATCACCACAT CTCGAG                                456

```

(2) INFORMATION FOR SEQ ID NO:716:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:716:

```

GAATTCGGCC TTCATGGCCT AGATCATTCA GTGGCTCACC TAATATCACA GAACAAGTGG      60
TGGAGTCAGA ATCTTTTATC TAAAGGAGAT ATTTTCATCC TTAGATTAAT GTCCTCTTCA      120
CAGTCTCATG CTACTTTCCT TTAATATGAA ATTGCTGTTC TTTTITTAAT TGATTGGGCC      180
AACTTCATTT GTAACGGAAG AATCAAAATT AGAGCCCGGG TCTCATCCTA CGGTATCTCG      240
TCCTGAACCT CTGGTCTCCC TCAAGATGA CTCAGAAGGA CGGACTCGAG                    290

```

(2) INFORMATION FOR SEQ ID NO:717:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:717:

```

GAATTCGGCC TTCATGGCCT AAAAAAAAAA GCCTTTTAAA CTGTAGGAA TTAAGAAATA      60
AGATAACCT ACAAAATGCT AGCAAAATTT ATCTCATTTT TTTTCATTGT ATTTTCAGGT      120
TTAACTGAAC TGAATGACAG TCCAGTTCCT CTAGAACTTG AGCGCTGCAA GTCCTCTACC      180
TCAGACCATG TAAATGGACA CTGCACAGT CCAACTTCTC AGAGTTGCAG TTCTGGAAAA      240
CGTCTTCTA GTGCCGATGT TTCAAAAGTA AATCGCTGGG GTCCTGGAAG ACCACCAAGT      300
CTCGAG                                306

```

(2) INFORMATION FOR SEQ ID NO:718:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:718:

```
GAATTCGGCC TTCATGGCCT AATATTTATT AAATGACTTG GTAGATAGAG CAACTGACTG      60
AATATATTAT TTTTATAGGAA GAAGAAGAAC ATTTTTCCTT AAATTAAATT TCTTATTTTA      120
TTTCTCTTTC CCCTTTTATC CAGGGTAGGT CCAGGTAAAG CCAAAGGCCT TATCCTTATC      180
TACACTGCTG GGGGACACAA CACAAGAATT TCAAGTTCAA GTATTATTTT TCATTTTGAG      240
TAATTTTGTG CTCATTTTGT TCCAGTTCTC ACTCTCAGAA AAAGATTACT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:719:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:719:

```
GAAACAATAG AAACACTGAG AGAAAATTCA GAGAGACAGA TTAAGATACT GGAACAGGAA      60
AATGAACATC TGAATCAAAC AGTGTCTTCC TTAAGGCAGC GGTCCAGAT AAGTGAGAA      120
GCAAGAGTGA AAGACATTGA AAAAGAAAAC AAAATTCTTC ATGAATCTAT CAAAGAAACA      180
AGTAGCAAGC TAAGCAAGAT TGAATTGAA AAAAGACAAA TTAATAAAGA ATTGGAACAT      240
TATAAAGAAA AAGGAAGCTC GAG          263
```

(2) INFORMATION FOR SEQ ID NO:720:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 320 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:720:

```
GAATTCGGCC TTCATGGCCT ACCTGCCCTT CTGCGGTCAC AGCTGCCTGC TGGGTGGGAG      60
TCCGGGGGAA TGGTATGTGT GGTCACCAGA GGGCACTGAG TGGGCTTCAG TGGCATGTGA      120
ATCCTGGCAG AGTCTCGGAT CCCCAGTGGG GAGAGGAGAA AGCACAAGCC AAGACAACGA      180
GTGGGGGAAG GAGGCAGGGG CTAAGTGACG GGTGGGGGGT GGGGGTGGGA ACTCCAGTGT      240
ACACATTGAC AGTCTCTATG TTGGCTTCAC CAGCGCTTCT CTGTTTGTCT CGTCCCTGGA      300
TTTCTAACAG TTGCCTCGAG          320
```

(2) INFORMATION FOR SEQ ID NO:721:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:721:

```

GAATTCGGCC TTCATGGCCT AGTCGGGAGT GTCTTAAGCT TTTCATTTAA CCTAAAGTAC      60
AGAGTCTGCT CTGTAGAAAT ATGTCATTAA GAAAATATTT GAGTCCCAGC TCCTCCTTGT      120
TGTGTAATGT CTGATAATTT CACTCATTAA ATTACCCAGA CAGACCATAA AGTCCTCTCA      180
GTTTGCAATCA CCTGAAAGTC AGTCAGCCTG GGCTGTGAGG ATTGTGAGGT AGAACTCACT      240
GTGAAGGAC GGCATTAGGG AAGACTTTAG GAAATGGAG CGGAACCTCG AG                292

```

(2) INFORMATION FOR SEQ ID NO:722:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:722:

```

CTCGAGACCT GTGTGCGCAG GCAACGGGGA AACTGGAAAT GCGTTGACAA ACTGACGCAA      60
AACTGGGCCC AACAGCCACA AGGCACTGGT CGTTTTCCAC TGGGCAAAGT TCAGTCGCAT      120
TTCTTTCTGT TCTCTTTCTT TCTTTCTTTT CTTTTTCTC TTTCTTTCTT TCTTTCTTTC      180
TTTCTTTTTT CTTTCTCTCT CTCTTCTGT CTGTCTCTCT CTTTCTTCC TTCTTTCCTT      240
CCTTCCTTCT TTCTTTCCTT CCTTTCCTTT CTTTCTTTT TTTTCTTTT AAGAGACGGA      300
GTCTCGCTCT GTTACCCAGG CCGGAGTGCA ATGGCACAAT CTCGGCTCAC TAGGCCATGA      360
AGGCCGAATT C                    371

```

(2) INFORMATION FOR SEQ ID NO:723:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:723:

```

GAATTCGGCC TTCATGGCCT AGTTCCTTGG TGGTTTGAAA GTTAGAGAGA TCCTGATAAG      60
CATAATGACC AACATAGAAG AGATTAAGTA CCTTTACTCA TAAATGTGAG TTCACAGACT      120
TCAGGTCTAA ATTCGTAACA ATATTTAAGA TGTATATGGC TTAAAGTGCT GGTAGTTTTG      180
ATTAGAATCC ATAGGTTTCT AGTCACTGCT CTTTTCATTA TTTGAGTTT TATGTATTTT      240
TTAACTAGAA ATAAGAGGGT CTCGAG                266

```

(2) INFORMATION FOR SEQ ID NO:724:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:724:

```

GAATTCGGCT TCATGGCCTA GAAAGTTTTT CAAAAATTCT TCAATTGTCT CTGTTTGATG      60
CAACTTAATT TTTTGCTGAG AGAGACCTTA AATGTAATTA GTATTGTATA ATTAGCCTGA      120
TTAATCTGAC CTGTACATCA CGAGTCACTT GTCTTTAGCC CAAGAGGAAT GCTTCCTTTC      180
TGATTTGAGG CAGTGGCCCA TCATTGCTTC TAGCAACCTT CCTACTTACT AGATGACCTT      240
GAGTCAAGGT TTCTGTATAT ATGATTTTCTG ATTTGTCCCC TAGAACTGAA AAAGGGTAGG      300
AGAGGCAAAG ATAGGAAAAA TATTTTTTAA AAATTTTTAA GTATTTTATT TTTATTGGGA      360
AAATATTTAT TGTAAGTCTT CCATTGTGTA TCCTTCTGCC ACTAGCATTG CGTAAAAAGT      420
AAAAAGAGCT TTACATCAAA AAGCACAATG AAACCTTTGTA TCCTTAAGTC CGTACTCGAG      480

```

(2) INFORMATION FOR SEQ ID NO:725:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:725:

```

GAATTCGGCC TTCATGGCCT AGTCGGAGGT GTAGGAGGGG CCGTGGAGGT CCAGGTGACT      60
GCTTAGAAAA CTGCACAGCA TCTGATGAAA TTAGCGAATA AGAACATCAA CCATGTCTTA      120
CACTCCAGGA GTTGGTGGTG ACCCGGCCCA GTTGGCCCGAG AGGATCTCTT CTAACATCCA      180
GAAGATCACA CAGTGTCTTG TGGAAATACA AAGAACTCTG AATCAACTTG GAACACCTCA      240
AGATTCACCT GAATTGAGGC AACAGTTGCA ACAGAAGCAG CAGTATACTA ACCAGCTTGC      300
CAAAGAAACA GATAAGTACA TTAAGAGATT TGGATCTCTG CCCACCACCC CCAGTGAACA      360
CGGTCAAAGG AAAATACAGA AGGATCGCTT AGTGGCAGAG TTCACAACAT CACTGACAAA      420
CTTCCGCAAG GACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:726:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:726:

```

GAATTCGGCC TTCATGGCCT AGCTACCTAT CTACAAAAAC TCCTGGATCC TTTATTACGA      60
ATTGTGATCA CATCCTCTGA TTGGCAACAT GTTAGCTTTG AAGTGGATCC TACCAGGTTT      120
GTCATCTTTT CACATAGAAC CGCTGTTTTT TGTTTTTTTT TTTTGTGTTT TTTGTTTACT      180
AACACTGCAT GAAGCAAGGC ACCTTCTCCC CTTGATCATT AAAATTAGTT TTTAATTATA      240
AAAGTTATAT ACAAATACAC GTTCTTTTAA TGATATCTGT AATTTTTTTT TAAGGTATCC      300
TTTTATTGTC CTTAGATCCA GGGACAAACT AGAGAAAGGT GTCCTTGACT TCCACCTCCA      360
GAGACTGTGA CTAGTTAAGT CTGTTCCCTT GTCCTTTTTC CATGCACCGC CTCGAG      416

```

(2) INFORMATION FOR SEQ ID NO:727:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:727:

```

GAATTCGGCC TTCATGGCCT AAGGAGGTCC ATGAGGAAGT GTCCAGCCT GTCAGTGCAT      60
CTCATGAGTT CGCTAGTGA TCAGCAGACA GTTCCAGGAA GTGAACAAGT CCAAGAGGAC      120
TTCTGATTAG TCCACAGTCT CCTCTATAGG CTCAGTAGAT GAAGGCGTTT CTGAGGGCTT      180
GCCTACACTT CAAAGCACGT CTAGCACTAA TGCTCCTCCG GATGATGATG ATCGATTGGA      240
AAATGTTTCTG TATCCCTACC AACTCTACAT TGCTCCTTCC ACCAGCAGTA CAGAGCGACC      300
AAGTCCAAAT GGTCCCGACA GACCTTTTCA GTGTCCAACC TGCGGGGTGC GATTCAACCG      360
TATTCAGAAC CTAAGCAGC ACATGCTCAT CCACTCAGGA ATTAAACCAT TTCAGTGTGA      420
CCGCTGTGGG TCTCGAG                                         437

```

(2) INFORMATION FOR SEQ ID NO:728:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:728:

```

GAATTCGGCC TTCATGGCCT AGATCACTGC CCTTTCAATA ACACTCTTGC CTCTAGAATC      60
ATATGTTCAA AGTATGAATA CACACCTAGC ACATAGTAGG TGCTCAAATA TTAATTTCCT      120
CCTTGCCTTC CTTATCTACC CTGTGTCTC CATTTCCCCG TATGATTCCA ACCCAATATA      180
GCAAATGACA TTTACATGTT ATGAAAACAT CTATTGGGTA AAATCAGATC TTGGATAAAG      240
AAATTCTGAC TTTTATATAA GCTTTTGGTA GACAGAAAAA ACAGAAAGGT ATTCGTTGGT      300
AGAACATTTT TAAGTTCAGG AAAGAAAGCT GGAATAATAC TACGTAACCT TGTCCAGGTT      360
ACTTTGACTG AAACACGTTT TTGGTGGATT TCTTTCTCTC AAAGAACTCT CTAATATGCAA      420
CTCCTTGCTG GATTCTCTAC CCGATCTCGA G                                         451

```

(2) INFORMATION FOR SEQ ID NO:729:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:729:

```

GAATTCACC ATTAAAGATA ATTTATATTA GTGTTTCTAT AACTTCTAAA ACATCTTTTG      60
ATAAGGATAA TAATCTCATT GTCATTCTGT ACTGATATTT GGATATAATC CTAGCAGGGC      120
ATAGCTCTGA TTAAGAACAA TTGAACCAT CAATTTTTTA TTAGCCTCTA TTTTCACTAG      180
CCAGGATATT TCATGAAAC TTTTGTGTT CAAAGCAAGT TTTTCTTTC CAATAGAAAG      240
TGTTATATTA GTAACAATT TTGTCTTCTG CCAAGACCAG CTCAGTCGGG AAGATCTTAA      300
CCCAGTGGA AACTCGAG                                         319

```

(2) INFORMATION FOR SEQ ID NO:730:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:730:

```

GAATTCGGCC TTCATGGCCT AGGGAAGAAT AAAGAACAAA ACCCAAACT TTGGACCTTA      60
AAAAACCCAG GCTGGCATT TAGTAGCAAT TGGGTGTGTT CGGTTTGAA TATATTGTA      120
TATACATGCC TCCATGTGCT TTGSCCTTCT GGTATCTTCA CCAGATGCTG CCTTTTTTTT      180
TTTTTTTAAAC AAGTTCCTGT TTCACTTTTC CAGCTAGCTG CTGGGTATCT CCAACAAAAT      240
ATCTCATAGA TCTCCCACT GTAATGTATT CAAGCCAAAA ATCAGCTCTG CCCATTCTCC      300
ATCCCAAAGC CCTCCTCTT GGTACCAGA CAACCTTAAC CAAACCACTC GAG      353

```

(2) INFORMATION FOR SEQ ID NO:731:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:731:

```

GAATTCGGCC TTCATGGCCT AGAGGAGGAA GGCCTTCGTA AAGGTTGCAT CTCGTCCTCC      60
TCGCTCCCGG GGACCCGCGG GAAAAAATAA AATCCAACAC CCAGGCCCGG CGGCTAGCCC      120
CTTCCACAG GCTCTCTCCG CTCGATTTTG TCACCGTTAT GTGGGAAGCG AATCCATGTA      180
TTTGCAAGCC CGAGTCTTTG AGCCGTGCTA TACCAGTTTG TCCAGATTGT TTATACTAGC      240
AATGCAGTTT ACGGTGAAGA CTGCCTTCC CTCTGGGAAT CTGGAGCTTC AGTAACAGGA      300
GATGTTTCAC AAAGCAGAAG AATTATTTTC TAAACAACA AACATGAAG TGGATGACAT      360
GGACACGTCA GATACCCAGC TCGAG      385

```

(2) INFORMATION FOR SEQ ID NO:732:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:732:

```

GAATTCGGCC TTCATGGCCT ACTCCGTCTC CAAAAAATAA AAAAAATAGT GTTCAGCAAG      60
GTTGAAGCAT AAAAGGTTAA TAGCCAGAAT CATTTATCAA TTGTATTCT ATACATCTAC      120
AAGACACAAT CTGAAAATGA AATTAGAGAA ACAATTTTCA TGGGCAACAA GAGCAAACT      180
TCATCTCAA ATAATAATA TAATAATAAT AATCATCATC ATCATCATCA TCTACAATGT      240
CATTTCCCAT CCAAGTCTCG AG      262

```

(2) INFORMATION FOR SEQ ID NO:733:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 503 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:733:

GAATTCGGCC	TTCATGGCCT	AGACCTGCCT	CGAGCTCCTG	GCCTCGGGCA	CTCTACCCGC	60
TTCAGCCTCC	CAAAGTGCTG	CGACTGATTA	CAAGTATGAG	CCACTACGCC	TGACCATAAC	120
ATGTAAATTT	ATGGCAAATG	GTAATTCACA	GCTCAATTCT	AAAATGTGAT	GAAATTTAAA	180
TCAGAAAGGC	CAAATGAGTC	ACTTTTCTT	AACACTAAGA	ATTATAAACC	TTTAAATTTT	240
TTTTGTACTG	TAATTTTTTA	TGTGACATGT	ATATGCTTTT	TAATATGTGT	GATAGGATGA	300
GGGGCAGGAG	AGGGGGCTCT	AGACATGAGG	GTGCCTGGGG	CCTCTGTAGA	CCTTCAGATG	360
GCCCTGGGTG	TTATAGCAAG	AGCTGGTCTA	CATCTAATAC	TACTGCAGGT	GCTGTCATGA	420
ATTCTTTGTA	TAATTCCTTG	TATATTAAAT	GACATTATTC	TATGTATAAT	GTCATTTAAT	480
ACTTATAACC	TACTTTCCTC	GAG				503

(2) INFORMATION FOR SEQ ID NO:734:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:734:

GAATTCGGCC	TTCATGGCNT	AATGGATTCA	TTTTTTTCA	GCAGCATGGC	ATAGTGGATT	60
ATGAAATCAA	AATTAACATC	ATGTGGAGTC	NTACATTGAA	ATCCCCCTTC	AACAAAATAG	120
TATACTATGA	GTATTTTAA	ATTATTTAAC	CCCTCCGAAC	ACCAATTGTT	ACACGAATAA	180
AACCTTGACAC	AACAGGATTT	TGTGGGGCGT	GAGTAACACA	ACATATACAA	AAGCACCTTA	240
TAAAGTGTTT	TATATAGCAA	CTTCTCTCTC	AGTTGAACG	GGTCTCAGGA	TAAATTAGCA	300
AATATGAATT	CTAACCTTTG	TACTTACATT	TTAATTCTGC	TAAGTGTGTG	AACCCCAATT	360
TAGCAATTAA	AATATTTATT	TCCAGAATGT	TTTGACCCTG	AGCATATTTT	TAAAAAGCAC	420
AGTAGCTCGA	G					431

(2) INFORMATION FOR SEQ ID NO:735:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:735:

AAAAGTGACT	GAAAGTTTGC	TAGTGTTTTT	AGTACCGATA	TTTACTGGTA	GTAAATATAT	60
ACTAAATCCA	GTGAAATATG	ACTTCTCTAA	CTGAGCTTGA	CATATCCTGG	TTATATCTCA	120
TGGCAGCTGA	AAACTAGAAA	TGACTTATTT	TTACCTTGTA	GCCACAGCAC	ACTTGAGGTT	180
ATTCTTAGGT	TTTTGTGTA	GACAAAGCTG	GTTAGTGACT	CCTGGATTAA	GAATTATGAG	240
TGATCCCAT	ACCCTCGAG					259

(2) INFORMATION FOR SEQ ID NO:736:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:736:

```

GAATTCGGCC TTCATGGCCT AAAGGATATT GGCATGTTCC TCTTCTCATC AATATCCTAA      60
AAGACATTTA TTTTTCACAC ACTCCTTGGG AAAAATTAAC TTTTTCAC TGAAAATATT      120
TCCTTTTTTG GTTATCTTGA TCTCAGATT A TTTGTGAAA GAATTTTACT GTACTTAGTT      180
CAAAGAGTA GAAAGAATGA TTTACTATTG CAGACATATG TAGGGTAAAA TCATAATTTA      240
TTTAAACTGA CTGTACAACA CCATTTAGAG TTGATATTGA CATAAATGTT ATTAGCTAC      300
TAATTTGGAA CTGCATTCTT CAACAATGCT GGCAAGCATC TTCCGTACTT AGCATACCAA      360
GTTGTAGGGG AGAGACTGTG TATATATTTT TTAAGAAGCAA TCCAATGGAT TTGTTTTTGT      420
TCATATTTTG GAAACAATC GAG                                         443

```

(2) INFORMATION FOR SEQ ID NO:737:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 482 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:737:

```

GAATTCGGCT TCATGGCCTA CAAAGATGG CCCTAAGCCT GGCCTCTAGC TTCTACTCGT      60
GGTGAATATT TCAGACCTAA AGATCCAGAT AGTATCTCTG TTCATATGTG AATAAGTTGA      120
AGATTGTGGG GCTACTTTTT CTCATAGCAC TTTATTTTGA ATGTTGTAG TTTGTGCTGA      180
GAATGGTCGT CCGTATTTGA ACCAATTATT TATTTTAAAA TATATTTAAG CTACATTTTT      240
GTTTGGAAAA ATTGCCATAA ATTTGGTGCC ACTTCTTTT ATTTATTGA CTGAGTTAAT      300
ATTATTGTAT TAACATTTTA AGTATATGGT GTTTACATTC TTATTTCTTT TGACATTTTG      360
GAAATAATCA TAACTGTCTT TTCCAAAATA ACCATTTTCT TGATGGAAC CTTCCTAGAG      420
TTTTTACCAA ATAGCTAACT TTAGTAGTAA AACCTCATG TGTATCCATT CCCCCTCG      480
AG                                         482

```

(2) INFORMATION FOR SEQ ID NO:738:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:738:

```

GAATTCGGCC TTCATGGCCT AGATTGTCAG TTTATCTTAG ATGATGAGGA AGCAGTACCA      60
AGAAAACACT TGGGGGTTGA TACAACAGGC ACATGAGCCC TTAAACTCC TTCCTGTTTT      120
TTTTCTTTTT TTTTCTCTT AGGTAGATTA GTGCATTTAA AGCCTGAAGT TAATTGACC      180
TAAATTTTT ATAAGTCTTT GCAGAAAGTT CACTTGTTC CTGAAATCAT CTCCTTGATA      240
ATTTTTTATG TAACAGTTGT TCATATTGTA GGAATGATAT ATATGTCATC CTGTTACACG      300
TGTCAGGCAC TTCAAAAGA CTCCAAGAGA ACATGCCTGA GAAAGATAAC TCCCAATTAA      360
AAATGATTCA GTCCCTCACT TGCAATATTC AGGATAAATG TGTGGAAACA TTAGGCTACC      420
AGATAAATAA AAGGTAGTTA TTCTTAGGG TGACTCAGCA AGATATTTCT CGAG          474

```

(2) INFORMATION FOR SEQ ID NO:739:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 211 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:739:

```
GAATTCGGCC TTCATGGCCT AGCCTTTGAG ATCAATACCT GTGAAAAGTA GGGAAAGAAA    60
GCAGATGAGG CATAGGGAAA AGGTGGACTG CCACAGGCAA CCCAGCGAAC CTCACCAGCA    120
GCTCTGGAGC TAAAATAGCT CTTCAGAATT GTCCAGAGTT GGGCTGAGGA GGCCAGAATT    180
TTATTGTGTG TCCCACGATG ACGACTTCGA G                                211
```

(2) INFORMATION FOR SEQ ID NO:740:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:740:

```
GAATTCGGCC TTCATGGCCT AAATACCTTA ATGGTGGTAG AGCCTTTACC TGTAGCTTGA    60
AAGGGGAAAG ATTGGAGGTA AGAGAGAAAA TGAAGAACA CCTCTGGGTC CTTCTGTCCA    120
GTTTTAGCA CTAGCTTAC TCAGCTATCC ATTATAGTTT TGCCCTTAAG AAGTCATGAT    180
TAACTTATGA AAAAATTAT TGGGGACAGG AGTGTGATAC CTTCCCTGGT TTTTTTTTGC    240
AGCCCTCAA TCCTATCTTC CTGCCCCACA ATGTGAGCAG CTACCCCTGA TACTCCTTTT    300
CTTTAATGAT TTAATATCA ACTTGATAAA TAACTTATAG GTGATAGTGA TAATTCCTGA    360
TTCCAAGAAT GCTCGAG                                377
```

(2) INFORMATION FOR SEQ ID NO:741:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:741:

```
GAATTCGGCC TTCATGGCCT AAGGCGTTTG GGGTTTCCTA GTTGTGCTGC TGCTCTTGCC    60
TAGGGAATCT GCTCTTGCTT TGGCCTCTTT CCTTGGGGCA AGAGTGAGGG GGACAGGGAG    120
CTTCAAGTCA GCCCTCCATG TTGAAGTTTG GTAGAAGCTC TGCCACACCC TTGGACTGGA    180
ACCCAGCCAT GCCAATCCCC ATGATCACCA ATCCGAACCC CTTGAAGTAG AATTTTCATA    240
CCCTACTGAC TAACCACCTT CTTAGCCAGG CCATAGCCAT TCAGCAGTGC CTCCTTCCTC    300
TGGGTAGACA AACAGCCTTG AACAGAAAGG TGAACACTC GAG                                343
```

(2) INFORMATION FOR SEQ ID NO:742:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:742:

```

GAATTCGGCC TTCATGGCCTA GAGTCCTTGT TGTCTTTGTC AAAGTTTGCT CATCACCTCT    60
CCCCTCCCTC TGGCTCTTTT CCGTGGTGAT GCATAGTTCA ATGCGCCAG GAAGCTTCAT    120
GATGAGGCCG TCACCAAC TAGCAGCCCT CCTTTCCTTC TTTCTTTGCC AAGTGTCTG    180
GACATCAGCT CTTCCTCAGT CTTTGACTCT AAATAAGAA CTTGAATTTC ACCATTCAAC    240
TGAAATCCCT CTAACCTCG                                     259

```

(2) INFORMATION FOR SEQ ID NO:743:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:743:

```

GAATTCGGCC TTCATGGCCT ACACGTCGC CATTGCCAGA AAGAGCGATT TATGGCTTTG    60
TTCTTTTCTT AAGCTCCCAA TTTGGCTTCA TACTTTACCT CGTGTGGGCC TTTATTCCTG    120
AATCTTGCTT AAATCTTTTA GGTTTAACTT ATTGGCCTCA AAAATATTGG GCAGTTGCAT    180
TACCTGTCTA CCTCCTTATT GCTATAGTAA TTGGCTACGT GCTCTTGTTC GGGATTAACA    240
TGATGAGTAC CTCTCCACTC GACTCCATCC ATACAATCAC AGATAACTAT GCAAAAAATC    300
AACAGCAGAA GAAATACCA GAGGAGGCCA TTCCAGCCTT AAGAGATATT TCTATTAGTG    360
AAGTAAACCA AATGTTCTTT CTTCAGCCA AAGAACTTTA CACCAAAAAC TGAAGTGTG    420
GTAACCATAG TAACACCAAG CACTCTGAG                                     450

```

(2) INFORMATION FOR SEQ ID NO:744:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:744:

```

GAATTCGGCC TTCATGGCCT AAATCTTCAG GGTCTTAACT TAGTTTTGA TCCCTAAAAT    60
TAGTGCTGCA TATGTAGACT CAGAAACCTC ACGTAAAAAT TTAATTGGC CTCAGGTTGG    120
CAATGTTCCA AGGCAATGGT TAGAAGCAA TTCAGATTCT CCAAGGCCTC AAATAATTCC    180
TACAGATAAA ATCCCAAGGA AATTCAGCAG TGCCTAGTCA AAAATCCACA AATCAGGCTC    240
GAG                                     243

```

(2) INFORMATION FOR SEQ ID NO:745:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 236 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:745:

```

AAGCGAGGCC CTGGGGGACA ACGTGAAACA ATACTGGGCT AACCTAAAGC TGTGGTTCAA      60
GCAGAAGATC AGCAAAGAGG AGTTTGACCT TGAAGCTCAT AGACTTCTCA CACAGGATAA      120
TGTCCATTCT CACAATGATT TCCTCCTGGC CATTCTCACG CGTTGTCAGA TTTTGGTTTC      180
TACACCAGAT GGTGCTGGAT CTTTGCTTG GCCAGGGGT TCCGCAGCTT CTCGAG      236

```

(2) INFORMATION FOR SEQ ID NO:746:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 215 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:746:

```

GAATTCTAGA CTGCCTCGA GCCTGCAGAC ATCTCCTCCT TCTTTGTGGT TCTGGGAGCC      60
ATTCTGTGCC TCTAAGTCC TCTTTCTTTT TTCTCACCAA TACACATATT TTCTGTCCTT      120
CGCAATTCTA TTAACCTCA CATTGATGG TTGTTTCTT AAAATTCCTT TACTTGGTTC      180
CTGCATTCTT CATTCCTTCC CAGCACAATC TCGAG      215

```

(2) INFORMATION FOR SEQ ID NO:747:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:747:

```

GAATTCGGCC TTCATGGCCT AGAAGAAAAC CCATCAGATA TTATAATAAG ACAATAACTC      60
AATTCAGAC TTGTAAACAA AGGTGACATT AATCTATTGA AATGTGGGAA AATAGTCAAC      120
CTGTATCCTT CTCATACCAT AAATCAGCAT GTTTGATCAC TGAAGCTTC ATTTTGATGA      180
TTAGCAGTCA TGTATTGAGG CTAATGATA TGTTCGCG ACAGCATCTC GAG      233

```

(2) INFORMATION FOR SEQ ID NO:748:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:748:

```

GAATTCGCCT TCATGGCCTA CACAGGAGAA AAACCTATG AATGTAGTGA ATGTGGGAAA      60
ACTTTTGTTT AGAAGTCCAC CCTCAGAGAT CATCACAGAA TTCACACAGG GGAGAAATCC      120
TTCAATGCA ATCAATGTGG AAAACATTT GGCCAGAAGT CAACCTCAG AATACATCAG      180

```

AGAACTCACA CTGGGGAGAA AACTTACCAG TGTAATGAAT GTGAAAAATC CTTCTGGCGA 240
AAAGATCATC TCATTCAACA TCAACTCGAG 270

(2) INFORMATION FOR SEQ ID NO:749:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:749:

GAATTCTAGT TTAATTACAT ATACCTCTCT GTTGGCTTAG TAGTAATAAA AATATTTTCT 60
GTAGGTGTAG AATATCCTTA CAGTCCAAAA GGAGAGTACA TGTCACAAT TAAACTTTGA 120
AATTTGTGCT TTGATAACAG CATGTTTTAT TCATTCATTT TTATAATAAT ATTACTGAGC 180
CTGTATCATA TAGTGATGAA CTTTCAGCT GTTTTGAGGG TTTGTGTTAG CCACATTCAC 240
ATTTGTATAA CCTGTGTTT TTTTATTATT TTCTTTATTT TCATTTTAGA TTCAGGGGGT 300
CGGCTCGAG 309

(2) INFORMATION FOR SEQ ID NO:750:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:750:

GAATTCGGCC TTCATGGCCT AAGCTCTTTT AGTGAAGGAT TGTTTTAAAT AAGAGCTCTC 60
AGTTCAAGAC AACTACTGTT AGGAGCTTAA ATCGGAACCA CAATCAGCAT ATAAAGGTCC 120
TAATCCTGAC CTTAATCCCT TTGGAATATT GGTTTTATAA ATCATCAATC AACAGTGTTT 180
CACTATGAAA GCATATTCG TCTTCTTCTT TTCATGTATT CCTTCACTGC TGGTGCTTAA 240
TGTCTTTCCT TCCTCTTCTG CCATTTCTCT TTCCATGAAT TATAATTGCC TTTTGAATTC 300
AGAAATTAAG ACCACTCCAC AGCTCGAG 328

(2) INFORMATION FOR SEQ ID NO:751:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:751:

GAATTCGGCC TTCATGGCCT AATAAGGAAG AAATGTCTC ACTTTATGA ATAGTTGATT 60
TAAATTTTCT GGTATTTAGA GGTAATATAG TATAAGTTT TTGTATATTT ATCTAAGATT 120
TTCCTTTTGA AAATTTTCTT CCCTTTTCAT ATTATTTTCA TTAACGATT TTCCTTTAAA 180
ATTGTGTACT AACAAGAACT ATCTAATATG CAATGAGATT TTTGCAGGC ATTCTCGAG 239

(2) INFORMATION FOR SEQ ID NO:752:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:752:

```

GAATTCGGCC TTCATGGCCT AAGGAAAGTA CTTTAGACAA AAAAAAAAAA AAAAGTGAAA      60
TTAATTCCTG GGGCAATGAA AGGAAATGTC ATTGGCAGTT TTACCTTTAT TCTGCTAATG      120
GCTATTGTGT GTCTGTTTAC CTGGAGGCAC TTGGAACCTG TGGCACAGAA TGCTGTATGT      180
ACAGGATATC ATCTACATGG GAATAATTGT TGTAACACC CCAACTCGA G                  231

```

(2) INFORMATION FOR SEQ ID NO:753:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 308 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:753:

```

GAATTCGGCC TTCATGGCCT ACAATAGAGC TCTTAACTT ATTTAACTGA AATTTGTAT      60
CTTTTACCA ACATTTCCC AACTCCCCCTT TACCCCACT ACTCCAGCCA CTGATAACCA      120
CCATTCTGTT CTCTATTCT TTTCTTTTT TTTTTTTTT TTTTAAAGAG ATGGCGTCTT      180
GCTGTGTCGC CCAGGCTGAA GGGCAGTGGC ATGATCTCGG CTTACTGCAA CCTCTGCCTC      240
CCCGGTTTAA GCAATTCTCT ACCTCAGCCT CCCGAGTAGC TGGGATTACA AGCACCCATC      300
CACTCGAG                                     308

```

(2) INFORMATION FOR SEQ ID NO:754:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 124 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:754:

```

GAATTCCTAGA CCTGCCTCGA GCCCTTGTG GTTTTAAAGA AAAAAATTCT GTGCAGATCT      60
GTTCTCTCTC CTGCTCCTTC CCTTTCTCT ACATACAGTG CTCATTGGAG GCTCCCCACT      120
CGAG                                     124

```

(2) INFORMATION FOR SEQ ID NO:755:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 369 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:755:

```

GAATTCGGCC TTCATGGCCT AATCGGTGTC TTTGGTAAAA ATTCTATGAG GATGACATAT      60
TCCATCATGT TATTCGTTTC ACATTTCCTT TTGCTCAGTC TCCAATGCAA GCACAGCTTG      120
TGGTATAACC TATTGTTTTC CCATTCTAAT AACTTCTCAA TCGATCTTCG TGTTCCTTTA      180
CTGAGGCAAA TAACTGGCCA CATACTGCAA CCTAATGTGC AGCAGCAACA AAGGCAGCCA      240
CAAAGTAGCC AACGTACATT AACAGGAAGG TTCTTCTTAA GACAACTGTT AACTCTGTTG      300
ATGCTGGCTT TAAATTCTTC AGGAGCTACT TTTTCAGTTA ATGAAGAAGG GAATTCAGAT      360
TCAAATTTG

```

(2) INFORMATION FOR SEQ ID NO:756:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:756:

```

GAATTCGGCC TTCATGGCCT ACCGGCGAGG AATAGGAATC ATGGCGGCTG CGCTGTTGCT      60
GCTGCTGGGA TTCGCGCTGC TGGGCACCCA CGGAGCCTCC GGGGCTGCCG GCACAGTCTT      120
CACTACCGTA GAAGACCTTG GCTCCAAGAT ACTCCTCACC TGCTCCTTGA ATGACAGCGC      180
CACAGAGGTC ACAGGGCACC GCTGGCTGAA GGGGGGCGTG GTGCTGAAGG AGGATGCGCT      240
GCCCCGCCAG AAAACGGAGT TCAAGGTGGA CTCGGACGAC CAGTGGGGAG AGTACTCCTG      300
CGTCTTCCTC CCCGAGCCCA TGGGCACGGC CAACATCCAG CTCCACGGGC CTCCAGAGT      360
GAAGGCTGTG AAGTCGTGAG AACGCATCCT CGAG

```

(2) INFORMATION FOR SEQ ID NO:757:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:757:

```

GAATTCGGCC TTCATGGCCT ACTGATGTTG AAGACGACAC CACGGCTTTG ATGGAATATC      60
AGATATTGAA AATGTCTCTC TGCTGTGTC TCCTTCTGTT TCTCACACCT GGTATTTTAT      120
GCATTGTGCC TCTCCAATGT ATATGCACAG AGAGGCACAG GCATGTGGAC TGTTCAGGCA      180
GAAACTTGTC TACATTACCA TCTGGACTGC AAGAGAATAT TATACATTTA AACCTGTCTT      240
ATAACCACTT TACTGATCTG CATAACCACT TAACCCAATA TACCAATCTG AGGACCCCTGG      300
ACATTTCAAA CAACAGGCTT GAAAGCCTGC CTGCTCACTT ACCTCGGTCT CTGTGGAACA      360
TGTCTGCTGC TAACAACAAC ATTAACTTC TTGACAAATC TGATACTGCT TATCAGTGGA      420
ATCTTAAATA TCTGGATGTT TCTAAGAACA TGCTGGAAAA GGTGTCTCTC ATTAATAATA      480
CACTAAGAAG TCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:758:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:758:

```

GAATTCGGCC TTCATGGCCT AACCAAATCA ACAACAACCT ATTTAGCTGT TCCCCAACCT      60
TTTCCTCCGA CCCCCTAACA ACCCCCTCC TAATACTAAC TACCTGACTC CTACCCCTCA      120
CAATCATGGC AAGCCAACGC CACTTATCCA GTGAACCACT ATCAGCAAAA AAACCTACC      180
TCTCTATACT AATCTCCTA CAAATCTCCT TAATTATAAC ATTCACAGCC ACAAACCTCG      240
AG                                                                                   242

```

(2) INFORMATION FOR SEQ ID NO:759:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 221 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:759:

```

GAATTCGGCC TTCATAGCCT ACCTAAATTA ATAATAATGT ATAGTTCAGA ATTGCTAAGA      60
GTACTTTTTT TTTTTTTTTT TNGAGACAGG TTCTCGCTCT GCCCTCCAGC CTGGTGACAG      120
AGCAAGATTG CATCTCAAAA AAGAAAAAAA ACACACAGCT AATAGAATTG CCATTGTTTT      180
TCATAATAGA ATCTAGCTGC TTA CTCAAC CTCACCTCGA G                               221

```

(2) INFORMATION FOR SEQ ID NO:760:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:760:

```

GAATTCGGCC TTCATGGCCT AAAATCAAAG ACTTTGCCAA TACCATTCTT GGCCATGGAG      60
GCATCATGGA TCGCTTTGAC TGCCAGTATC TGATGGCCAC CTTTGTCAT GTATACATCG      120
CCAGTTTAT CAGAGGCCCT AACCCAAGCA AACTGATTCA GCAGTTCCTG ACTTTACGGC      180
CAGATCAGCA GCTCCACATC TTCAACACGC TGCGGTCTCA TCTGATCGAC AAAGGGATGC      240
TGACATCCAC CACAGAGGAC GAGTAGGGGC CACCCAGGGC CAGGAGAACA GGAACAGAAC      300
TGAGCAGGGG CAGGTCTCCA AGGCAAGCCC AGCTGGTGTG ACTTAGACAA TGACGAGGCT      360
TCAACTCACT GTCTTTTTT TTTTTTTT GAGGGTATTT TTTATTGTG GGTTCAAAAA      420
ATCTGTATAT ACAGTCTATG TGTTTAGAAT TTGTGTTGTA AGTAACTAC AGCTTTGAGT      480
TGGAAGAAG TCACGGGTTG TAAACCAT TGGATTTTTT TAAACAAAA GTATTAATAA      540
TCTGGAAGAC TCGAG                                                                                   555

```

(2) INFORMATION FOR SEQ ID NO:761:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:761:

```

GGCCGATCAG GTTATTTT GAAAGTTT CTTACAGAGC ATATAAATTA CCCTTGGTTA      60
TTCTCAGCTG TGATTGAGTT CTGTGAAAGC ATAGTACCCT AGTACCCTGG GATATCTCTA    120
CATGTGAAAT TATTCAAATG TCTCCCTTAC TTTT TTTT TTTT AGACAGGCTC      180
TGTTGCCCAT GCTGCAGTGC AGTGGCACA CTATGGCTCA TCTCAGCCTC GACCTCCTGG    240
GCTCAAGCGA TCCTCCACC TCAGCCCCC AGGCAGCTGG GACCACAGGC ACACACCACC    300
ATGTCCAGCC AATTCCTGTA TTTT                                         324

```

(2) INFORMATION FOR SEQ ID NO:762:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:762:

```

GAATTCGGCC TTCATGGCCT AGTGCCGGGG AGAAAGGGCT TCCTCCCCCA CACATCAGAC    60
AGGGCACCAA TGAGTGGGGC ACTCAAAAA GAGAGCAGGC CCTGGAGAGG AAACCAAAGC    120
AAAGGTTAGT TTTATAATCT GATCCCTCAA TTACCTGTAA TTCATATTTT CTAAATGCAT    180
TAGCTCTAAT TCATTGTACT GCCCCAAAA CAGAATAATA CTTTGAAACA TTAATACAA    240
ACTACAATA AAAAATAAA ATTAGGCTG GCGTGGTGGC TCATGCCTGT AATCCCAGCA    300
CTTTGGAAGG CCGAGGCGGG TGGATCACTC GAG                               333

```

(2) INFORMATION FOR SEQ ID NO:763:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:763:

```

GAATTCGGCC TTCATGGCCT AATTGAATC AACACAACCA CCCACAGCCT AATTATTAGC    60
ATCATCCCTC TACTATTTT TAACCAATC AACACAACC TATTAGCTG TTCCCAACC    120
TTTTCCTCG ACCCCCTAAC AACCCCTC CTAACTAA CTACCTGACT CCTACCCCTC    180
ACAATCATGG CAAGCCAACG CCACTTATCC AGTGAACCAC TATCAGAAA AAACTCTAC    240
CTCTCTATAC TAATCTCCCT ACAAATCTCC TTAATTATAA CATTACAAC CACAGAATC    300
GAG                               303

```

(2) INFORMATION FOR SEQ ID NO:764:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 265 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:764:

GAATTCGGCC	TTCATGGCCT	AGGGATTAA	AGAGTTTTTC	TGGGTGTTT	GTCAAACCTT	60
TATTCCCTGT	CTGTGTGCAG	AGGGGATTCA	ACTTCAATTT	TTCTGCAGTG	GCTCTGGGTC	120
CAGCCCCCTTA	CTTAAAGATC	TGGAAGCAT	GAAGACTGGG	CTTTTTTTCC	TATGTCTCTT	180
GGGAACTGCA	GCTGCAATCC	CGACAAATGC	AAGATTATTA	TCTGATCATT	CCAAACCAAC	240
TGCTGAAACG	GTAGCACCTC	TCGAG				265

(2) INFORMATION FOR SEQ ID NO:765:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:765:

GAATTCGGCC	TTCATGGCCT	ACCAACAGCA	AGCTCCAATA	TCACACATCC	AGACTCCTAT	60
GCTTTCCCAA	GAACAGGCAC	AACCCCGCA	GCAGGGTTTA	TTTCAGCCTC	AGGTGGCCCT	120
GGGCTCCCTT	CCACCTAATC	CAATGCCTCA	AAGCCAACAA	GGAACCATGT	TCCAGTCACA	180
GCACTCAATA	GTTGCCATGC	AGAGTAACTC	TCCATCCCAG	GAACAGCAGC	AGCAGCAGCA	240
ACAGCAGCAG	CAACAGCAGC	AGCAACAACA	ACAGAGCATT	TTATTGAGTA	ATCAGAATAC	300
CATGGCTACA	ATGGCGTCTC	CAAAGCAACC	ACCACCAAAC	ATGATATTCA	ACCCAAATCA	360
AAATCCAATG	GCTAATCAGG	AGCAACAGAA	CCAGTCAATT	TTTCACCAAC	AAAGTAACAG	420
TCTCGAG						427

(2) INFORMATION FOR SEQ ID NO:766:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:766:

CGATTGAATT	CTTGCTGTT	CTGCCTCACT	CCCGAGCTCT	ACTGACTCCC	AACAGAGCGC	60
CCAAGAAGAA	AATGGCCATA	AGTGGAGTCC	CTGTGCTAGG	ATTTTTCATC	ATAGCTGTGC	120
TGATGAGCGC	TCAGGAATCA	TGGGCTATCA	AAGAAGAACA	TGTGATCATC	CAGGCCGAGT	180
TCTATCTGAA	TCCTGACCAA	TCAGGCGAGT	TTATGTTTGA	CTTTGATGGT	GATGAGATTT	240
TCCATGTGGA	TATGGCAAAG	AAGGAGGGTC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:767:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:767:

GAATTCGGCC	TTCATGGCCT	ACGTAATTCT	GGAAAAGTGA	ATACTTGTGA	AGAGTCGTCT	60
TGAATGATTI	GTAATAAATC	CTGTTCTTAT	ATTCAACGAG	TTTCGAATCT	TTGTCAGAGG	120

AGTATTACCA TTAGATTGAA AAAAAGGAAA ATAAATAATA AACACTTTTA AAAAACTCC	180
CCATTCTCTT ATTCTCACTT TTAGGAAAAG AGACTGACTA ATATCTTCTG CCACAAATAC	240
CGATGTTCTT AAAAATATTT ATGGGACTGC TTTTGGCAAC CAGCCCTATT TTGTTTTCAT	300
ATCCCTTTT GTCCTCATCT TTCCAACTC ATAACTCGA G	341

(2) INFORMATION FOR SEQ ID NO:768:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:768:

GAATTCGGCC TTCATGGCCT ACAGAAAGAG TTTGAGACCT GAATAGCTCC CAGATTTTCAG	60
TCTTTTCCTG TTTTGTAA CTTGGGTTA AAAAAAAAAA AAGTCTGATT GGTTTAAAT	120
GAAGGAAAGA TTTGTACTAC AGTTCCTTTG TTGTAAAGAG TTGTGTTGTT CTTTCCCCC	180
AAAGTGGTTT CAGCAATATT TAAGGAGATG TAAGAGCTTT AAAAAAGAC ACTTGATACT	240
TGTTTTCAAA CCAGTATACA AGATAAGCTT CCAGGCTCGA G	281

(2) INFORMATION FOR SEQ ID NO:769:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:769:

GAATTCGGCC TTCATGGCCT ACTAACGAGG AAAGGGATT AAAGAGTTT TCTTGGGTGT	60
TTGTCAAAC TTTATTCCT GTCTGTGTGC AGAGGGGATT CAATTCAT TTTCTCGAC	120
TGGCTCTGGG TCCAGCCCCT TACTTAAAGA TCTGAAAGC ATGAAGACTG GCGTTTTTT	180
CCTATGTCTC TTGGGAACTG CAGCTGCAAT CCGACAAAT GCAAGATTAT TATCTGATCA	240
TTCCAAACCA ACTGCTGAAA CGGTAGCACC TGACAACACT GCAATCCCCA GTTTAAGGGC	300
TGAAGCTGAA GAAATGAAA AAGAAACAGC AGTATCCACA GAGAGACTCG AG	352

(2) INFORMATION FOR SEQ ID NO:770:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:770:

GAGCGTGGTG GATATAAAAC AGGTAAGAGA CTTTCATGGT ATACCTTTAT ATTGTTGGAT	60
TAAAGGCACT GCCAACTCAA AAAACTTAAC CGAAAATTTT TTTAATCAG TTAAATATTT	120
ACTGATATGA AAATGACATG AAATAACTT TTTGTGTTTT ACTTAAAGGG TGCTCTGTTT	180
GAAACTTCCT CAGACAACTG AATGGGAGAA CCAGATGAAT TTAGTAAAAG TATTAACGTC	240
AAATATTAT ACTGCTTTTT TTTGTTGTT TGTTTTGAG ACAGAACTT GCTCTGTTG	300

CCAGGCTGGT CTCGAG

316

(2) INFORMATION FOR SEQ ID NO:771:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 473 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:771:

GAATTCGGCC TTCATGGCCT ACTTTGATGG AATATCAGAT ATTGAAAATG TCTCTCGCC	60
TGTTCACTCT TCTGTTTCTC ACACCTGGTA TTTTATGCAT TTGTCCTCTC CAATGTATAT	120
GCACAGAGAG GCACAGGCAT GTGGACTGTT CAGGCAGAAA CTTGTCTACA TTACCATCTG	180
GACTGCAAGA GAATATTATA CATTTAAACC TGTCTTATAA CCACTTTACT GATCTGCATA	240
ACCACTTAAC CCAATATACC AATCTGAGGA CCCTGGACAT TTCAAACAAC AGGCTTGAAA	300
GCCTGCCTGC TCACTTACCT CGGTCTCTGT GGAACATGTC TGCTGCTAAC AACCACTTA	360
AACTTCTTGA CAAATCTGAT ACTGCTTATC AGTGGAATCT TAAATATCTG GATGTTTCTA	420
AGAACATGCT GGAAAAGGTT GTCTCATTAA AAAATACACT AAGAAGTCTC GAG	473

(2) INFORMATION FOR SEQ ID NO:772:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:772:

ATACAGTAAT CAAAGTAAGT AATATTTCAA TCCAATATTT TAAAAATCA GAATTAATGC	60
AAAAAAAACC ATGATGAACA AAATATTAAA ATTTAAAATA AAGACAGGAT TAGTATTACT	120
GAGTTTTCCT TTTGTCCCAG GCTCTAATAT GGCTTGGCAT GGGGCAGAAC ATTACAACAT	180
ACCACTCGTG TCATGGTGCC CAAGGCTCCA CAGACCTCAG TGGCTCCCTG CTGCTGCCA	240
CAGCAATCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:773:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:773:

GAATTCGGCC TTCATGGCCT AGTGAGAATT GACTGTTGCT TTTGTTTGCC TGCTTACTGT	60
TTTCTTTTAT TTATTTGTTT TTGGACCTGT GGCACAAAGG ATCTGTTTAC TGACCATCCT	120
TATGTGAGG CACACAGTCA CCATGGCACC CTGCGCGTTA CTCCTGTTCC ACTTGTTTAT	180
TCTCTGTATC CCCATACTAG TTATTATCGA AACCATCAGC CTACTCATTC AACCAATAGC	240
CCTGGCCGTA CGCCTAACCG CTAACATTAC TACAGGCCAC CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:774:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:774:

```

GAGGCTGACA AAATACTCAC CTTTACCTTT ATTTTGCAT TTTATACTCA CAACCATATT      60
TTTTTTGGCC CCCTTCCCTT TATTTTAACT CATAACTGAT ACTTAAAGGT GCTCTGCCTT      120
ATTAAATCAG CTCCTAGGCT GCAAGTGCAT AATATTTAAA AATTTGCAAC TTGACTTTT      180
TAAAAATCTG GTCTTGGTAT GGAGCAACTT TGCCTTTTTT TTTTTTTTTT TTGAGACAGA      240
GTCTCGCTTT NTCGCCCAGG CTGGAGTGCA GTGGTCCCAT CTCAGCTCAC TGCAACCTCC      300
TCCTCCCGGG TTCAAGAGAT TCTCCTGCCT CAGCCTCCCG AGTAGCTGGG ATTACAGGTG      360
CCTGCCCCAA CACCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:775:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:775:

```

GGCCTGGTAG GATAAGAATA TAAACTTCAG GGTGACCGAA AAATCAGAAT AGGTGTTGGT      60
ATAGAATGGG GTCTCCTCCT CCGCGGGGGT CGAAGAAGGT GGTGTGAGG TTGCGGTCTG      120
TTAGTAGTAT AGTGATGCCA GCAGCTAGGA CTGGGAGAGA TAGGAGAAGT AGGACTGCTG      180
TGATTAGGAC GGATCAGACG AAGAGGGGCG TTTGGTATTG GGTATGGA GGGGGTTTAA      240
TATTGATAAT TGTGTGATG AAATTGATGC CCCCTAAGAT AGAGGAGACA CCTGCTAGST      300
GTAAGGAGAA GATGGTTAGG TCTACGGAGG CTCCAGGGAA GCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:776:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:776:

```

GAATTCGGCC TTCATGGCCT AAGAGGATAA GGGAAGAAAA AGAAGAAAGT ATTCCATTCC      60
CACATCCCTT TAGGTGGCT TCTTATTTTA TGTTTTTGTG GGTGTGTTTA TTTTGCTTGT      120
TTAACATTTT CAACTAGCTA TAGAAACGTT TGCAATTCTT ATTACTGATT AGCATTCCAA      180
AACTTTGTAA TGAACATTTT TCTCTCTTTC TTTTTTTTTT TTTTNGAG ACAGGGTCTC      240
GCTCTGTCAC CAAGCTGGAG TGCAGTGAGC CAAGATCCTA CTGCTGTCCA TTCCAGCCTG      300
GGTGACAGAA CAAGACCTTG TCCGCCACC TTCCACCCCC CCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:777:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 377 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:777:

```

GAATTCGGCC TTCATGGCCT ACATGTTTAT TGAGCATTTA CTGTTTACCC ATCAGTATTC      60
TTGATGCTAA GGATATAGCA GTGAACAAAA CAATCCTTGT GGAATTACAT CATAGTAGGG      120
AAAATAGACA ATAAATAAAT GTATGATAAG TCAGTTGATA ATAAGTGCTA CGAAGTAAAA      180
CAAAGCAGGA ATAAAGTTGG GGAGAAAAGT GGAGGGTGAT TGCTATTTC A GTTGAGATCA      240
TTGGGATGGT CTTTCTGAG GAGGGGACAT TTGCATAGAG AAGCAAGGAT GTGAGTTATG      300
TGTCTGCTGT GTGTAGAACA TTCTGGGAAA GGGCAGAGAA GGAACAAGA CTATTCCAGA      360
AAAAGAGGGC ACTCGAG                                     377

```

(2) INFORMATION FOR SEQ ID NO:778:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:778:

```

GAATTCGGCC TTCATGGCCT AGCACAGCTA GACGGTTCCA GCTCAGGGTC TCTCATGAAG      60
TTGCAATCAA AATATTGGCA GGAGAGAAAA ACATATTTTC AGAAGCTGCA GGCATAGGAA      120
GACTTGGCTG GGGTTGAAGG ATCCACTTCC AAGATGGCGC ACTCAGTGGC TCTTGGCTGG      180
AGGCCTCAGT TCCCTGCTGC GTGGAGCTCT CCCTCCAGCT GCTTGAGTGG ACTCATGACA      240
TGCAGCTGGC CTCCCCTGGA GCAGTCGATC CAACAATGAG CATGGCCATG AACTAGAGCT      300
CGAG                                     304

```

(2) INFORMATION FOR SEQ ID NO:779:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:779:

```

GAATTCGGCC TTCATGGCCT AGCCAAAACC ACAGAATATA TAATATAGAT CTGGGGATA      60
CAGCAGAGAA AAAAGACAAA AATCCCTGTT ACAATCCGTT CTAGAATTGA TGTTCCTTGG      120
TTGGTTAATT CAAGTTTGA TTTCAGAAAT CTTACCTCTT GGTGACTGCC TAGAGTGGCA      180
TTGGGCTGGA GGGGAGGAAC TGTTTATGTT GGAAATGGGG AATGGGCCAA AAATGCAATT      240
GAGTAGGTTG ATTAACCTGT CTGCTGTCAG AGTGAAGCA GGGGTAGTTT CCCTTCCGA      300
CCAGAGGCAT CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:780:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 264 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:780:

```
GAATTCGGCC TTCATGGCCT ACAGAAGATT TGGACAATTC CATTGATAAA ACAGAAGCTG      60
GAATTAAGGA GCTTCAGAAG AGTATGGAGC GCTGGAAAAA TATGGAAAAA GAACATATGG      120
ATGCTATAAA TCATGATACT AAAGAACTGG AAAAGATGAC AAATCGGCAA GGCATGCTAT      180
TNAAGAAGAA AGAAGAGTGT ATGAAGAAAA TTCGAGAACT TGGATCACTT CCCCAGGAAG      240
CATTTGAAAA GCACCAGGCT CGAG                                         264
```

(2) INFORMATION FOR SEQ ID NO:781:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 580 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:781:

```
GAATTCGGCC AAAGAGGCCT AGCGATTGGG TCTTGATAT CTGTAAGCCG TTGAATTAGC      60
CCTGCCCTCT GTTCTTAGTT TAGGAGACCA TAGATGTGCC CTTATTATTG AAACGTATTT      120
TATTCAGTTA CTGAAGTTAT CTTACCTGAT ACATAATTTT ACCCATAGAA AATAATATGA      180
AAATAGCAAA ATCACTCAGG TAAGATAGAT GAGTGCCTGC TGTGTTCAAG AGACTGTTAA      240
TATGAGGCTC TGGGGCTGCA AAAAATCAAG TTGCTAAGAA ATATGAGGTC AGAGCAGCAG      300
AAGTTCTGAG TAACCACTGA TTA CTGGACT TGGGGTGATC AGAAGTGACT GTGTGGGAGA      360
GGTGAAATTG AGCAGACTCT GAAGGAACCT CTGGGTTTTG GTAAATAGGG AGCTGGGGAT      420
GAGGATGCCC CAGGTTTTAG AAAGAACACA GGCTGTTGAA TCACACCTGG GTTCAAACCC      480
TGGCTTGCTA CTCCTAGTT TGTGACCTTG TCAAATTCCT TGATTCTTTT TTTCTTTTTC      540
TTTTTTAAT TTTGGAGACA ACAGTCTCGC TCTGTCACCC                                         580
```

(2) INFORMATION FOR SEQ ID NO:782:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 131 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:782:

```
GAATTCGGCC AAAGAGGCCT AGAATGGTAG AGTAAAAAGA ACCCTCTGCT GAGTAACCAA      60
GCCTTTAATT TCCTGTTTCT GCTGTAGGGC TTTCACAAAT GCATTTTTC GCGGTGTTGGT      120
GTGTCCTCGA G                                         131
```

(2) INFORMATION FOR SEQ ID NO:783:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 121 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:783:

GAATTCGGCC AAAGAGGCCT AGATTGAGGT TGTGGTAGAT TAGGCGTAGG TAGAAGTAGA	60
GGTTAAGGAG GGTGATGGTG GCTATGATGG TCGGCTCGA GGCAGGTCTA GAATTCATC	120
G	121

(2) INFORMATION FOR SEQ ID NO:784:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 405 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:784:

GAATTCGGCC AAAGAGGCCT AAGCAAGATG AAGCCCAACA TCATCTTTGT ACTTTCCTG	60
CTCCTCATCT TGGAGAAGCA AGCAGCTGTG ATGGGACAAA AAGGTGGATC AAAAGGCCGA	120
TTACCAAGTG AATTTTCCCA ATTCCACAC GGACAAAAGG GCCAGCACTA TTCTGGACAA	180
AAAGGCAAGC AACAACTGA ATCCAAAGGC AGTTTTTCTA TTCAATACAC ATATCATGTA	240
GATGCCAATG ATCATGACCA GACCCGAAAA AGTCAGCAAT ATGATTGAA TGCCCTACAT	300
AAGACGACAA AATCACAACG ACATCTAGGT GGAAGTCAAC AACTGCTCCA TAATAACAA	360
GAAGGCAGAG ACCATGATAA ATCAAAAGGT CATTTTCACA GGGTA	405

(2) INFORMATION FOR SEQ ID NO:785:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 642 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:785:

GAATTCGGCC AAAGAGGCCT ACTACTCACC TCTTGCTCTC TCCCAACCAT AGAAACAGCC	60
ACGACTCCTA CCACAACTT GGGAAACACC ACCACTGAGA CCACCTCCCA CAGTACTCCC	120
AGCTTCACTT CTTCAGCCAT CTACTCCACC GTCAACATAT CCACAACTAC CATCTCCTCA	180
TTTCCCCCTT CCTCAGGTAC CATGGTGACA TTCACAACCA TGAACCCATC CTCTCTGAGT	240
ACAGACATAT CTACCACCAC ACTGAAAAAT ATCACCAGC CTTCTGTGGG CTCTACTGGT	300
TTCTGACTG CAGCTACAGA CCTCACCTCA ACATTCACTG TTTCCACTTC CTCAGCAATG	360
TCCACAAGTG TCACTCCATC TGCCCCCAGC ATCCAGAATA AAGAAATCTC AACACTTGTG	420
AGTACAACCA CTACCACCAG TCCCACTGAG AGAATGACTC TCACAAGTAC AGAGAATACC	480
CCGACAAGTT ACATCCTGAC CACCACTCCA GTGACATATT CATTTTCCCC TTCCATGTCT	540
GCCAGCAGTG ACTGGACCAC TGACACAGAG AGCATCTCCT CAGCTCCAGC CATCACCAGT	600
ACACTCCACA CAACAGCTGA ATCCACCCTG GCAGGTCTAG AA	642

(2) INFORMATION FOR SEQ ID NO:786:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 469 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:786:

```
GAATTCGGCC AAAGAGGCCT ATGGCCTTGG AAGGGATGAG CAAACGGAAG AGAAAGAGAA      60
GTGTCCAGGA GGGAGAGAAT CCTGACGACG GCGTTCGCGG GAGTCCGCGG GAAGACTACA      120
GGCTTGGACA GGTGCGCCAGT AGCTTATTTT CCGGCGAACA CCATTCCAGA GGTGGCACCG      180
GTCGGCTGGC GTCCTCTTTC AGTTCTCTGG AGCCCCAGAT TCAACCCGTG TACGTGCCTG      240
TGCCTAAACA AACCATCAAA AAAACGAAAC GGAATGAGGA GGAAGAAAGT ACATCCCAGA      300
TTGAAAGACC ACTTTCGCAA GAACCTGCCA AAAAAGTGAA AGCGAAGAAG AAACACACTA      360
ACGCAGAAAA AAAGTTGGCA GACAGGGAAA GCGCTCTAGC GAGTGCTGAT TTAGAAGAAG      420
AAATTCACCA GAAACAAGGG CTTAGCTCGA GCAGGTCTAG AATTCATG      469
```

(2) INFORMATION FOR SEQ ID NO:787:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 501 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:787:

```
GAATTCGGCC AAAGAGGCCT AAGAAAAGAT ATAAATCAGA GAAAAAGCAT GAAGCGTATC      60
ATATTGATTT TAACAGTATT GCTTGCCATG TTAGGCGAGG TTGCCTATGC GCAGAAAACG      120
TGTGTCATCG CATCGGCAGA AAATCATGTG CCTATTCGTG AAGCACTTAT TCATACCAAT      180
AACAAATCATT GGGCAAGAAC AGATTATCGG GGCTATTGGA CGATGCGCTA TCAGTTTGAT      240
TCAGCAACCG TATCGAAACC TGGTTTATG AAGGCCAATA TCCGGTACAA GGAAGTCCG      300
GATACTCTGT TTCTCTTGCC GGATGCCAAA CAGTTAGGCG AAGTGACAGT TTGGGGCAAG      360
AATCAGGAAG GCATCAAAAA TATGGAAGAG GATATTCAGG AGAAGATAAA CTCTTTGCCA      420
ACTTCATCTG CTGGCATTGG TTTTGATGCT TTCGGATGGA TGGATAAACA GGGAAAACGT      480
GATAAGAAGC ATCTGCAACA G      501
```

(2) INFORMATION FOR SEQ ID NO:788:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 122 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:788:

```
TGATGATCGA TATCCAGAAA GACACTGCGG TGGAAGGTGA GGAGATTGAA GTCAACTGCA      60
CTGCTATGGC CAGCAAGCCA GCCACGACTA TCAGGTGGTT CAAAGGGAAC GCAGAAGTCC      120
AG      122
```

(2) INFORMATION FOR SEQ ID NO:789:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:789:

GGTGAGCTGA GATCGCACCA CTGCACTGCA AGACCCTGTC TCAAAACAAA CAAACAAACA	60
ACAACAACAA CAACAAACCA AACCAACAA AAAACCTGCA TAGCCAACTA GACCAGCATA	120
GAGGGCGAAA ACCATGCTTT TTGTCAAATG GTACTGTTTA TTCTGTTTTC CTGTCAGCTG	180
GTTTGCCGCT TCTGATAAG CTAGCCCTTG CTGTGTGCAT GCAGGTTATA GTGCCCAGGC	240
TCATATTTCC TCTTCTTGCT GCACCTCACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:790:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 209 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:790:

GAATTCGGCC TTCATGGCCT AGGGAAAGGA GGCGGCAGCC AGGCTGTGTC CCCTGACCGT	60
TGGAGCGTCT GCGACCCCGG CATCCCCGCA CCCTCAAGGC ACCTCCAAAG ATGATGATGG	120
GTTGTGGGGA GTCAGAGCTG AAGTCGGCGG ACGGGGAAGA AGCCGCGGCG GTCCCGGGGC	180
CACCCCGGGA GCCCAAGTC CCGCAACCG	209

(2) INFORMATION FOR SEQ ID NO:791:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 389 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:791:

GAGAGAATTA AAGAGAACCA CNAAGCTGAA CCTCAAAAAG TTAGCCTGGC GAGGGGAGGA	60
TGATGAGATT TCCCCTGTTG TCACATAAAC AAGGAAGTAA AGGGGGCCCC TTGTGCTCTC	120
AGAACTCCAA GCATGAAACG ATAGCAAAGG GAAAAACAGC TAAGTGTTC CTGGCTGAAT	180
TTTATTTTGC TTTCAGTTTC TGCCATTCA GTTCCTGTTA TCGTGCTTTG AGGTGCACTG	240
AACTGCAGCA AATCCAGGGG ATCCAAGGCT ACGTTGAAAA GCCTTTGACC ACAGTGCAGG	300
GAGCAGAAGA CATTAAATGAC GTGATGTCGA CACAGCCCGC ACTCAGGATC CTCCAGGAAA	360
AGAACACAGA GATAACCCCG GAACTCGAG	389

(2) INFORMATION FOR SEQ ID NO:792:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 332 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:792:

GTGCTTTGGA	TTTTGCATCC	AGCTTTTCT	CAACACCCCC	GCTGGAAGTC	AGCGGCTCCA	60
TCTCTTCGCC	TTCGGAAGCA	CCTGCGTCTC	TGTCTCTGAT	GCCGAGTGAC	TTGTCCCCTT	120
TCACATCTCA	GTCTTTTCT	CCCTGGGTG	AGACATTAC	ATTGTTTGAC	TCTAGTGATC	180
TGCAGTCATC	TCAGCTGTCT	CTTCCCAGTT	CCACAAATCT	TGAGTTTTCC	CAGCTCCAGC	240
CAAGTCCGA	GCTGCCTTTA	AACACCATCA	TGTTGCTACC	TANCCGTCTT	GAGGTGTCAC	300
CATGGTCAAG	CTTCCCTTCT	GATTCTCTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:793:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:793:

GAATTCGGCC	TTCATGGCCT	ACTGGAATT	CTTCTTGCC	CTTTCATATT	TAAAGATGGC	60
TGGAATAGCA	CAGGGAGTAT	ATAGCAGATA	TCTCTGGA	AATAATTCAT	CTGAGGATAG	120
CTTTTATT	GCCAAATATTG	TGCAACCTCT	GGCAGAACT	GGACTACAAC	TCTCCAAACG	180
AACTTTCAGT	ACTGTACTAC	CACAGATTGA	TACTACTGGA	CAGTTGTTTG	TACAGACTCG	240
GAAAGGTCAG	GAAGTTCTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:794:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:794:

GAATTCGGCC	TTCATGGCCT	ACTATGCCGT	CATGATAGAG	AAGATGATCC	TGAGAGACCT	60
GTGCCGTTTC	ATGTTTGTCT	ACGTCGTCTT	CTTGTTCGGG	TTTTCCACAG	CGGTGGTGAC	120
GCTGATTGAA	GACGGGAAGA	ATGACTCCCT	GCCGTCTGAG	TCCACGTCGC	ACAGGTGGCG	180
GGGGCCTGCC	TGCAGGCCCC	CCGATAGCTC	CTACAACAGC	CTGTACTCCA	CCTGCCTGGA	240
GCTGTTCAAG	TTCACCATCG	GCATGGGCGA	CCTGGAGTTC	ACTGAGAACC	ATGAACCTCT	300
CGAG						304

(2) INFORMATION FOR SEQ ID NO:795:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 255 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:795:

```

GCGATTGAAT TCTAGACCTG CCTCCAAGCA GCTGCAGTAT CTCGGAAGAA AAAACGAAGA   60
ATGGGAACCT ATAGCCTGGT TCCTAAGAAA AAGACCAAAG TATTAACA GAGGACGGTG   120
ATTGAGATGT TTAAGAGCAT AACTCATTCC ACTGTGGGT CCAAGGGGA GAAGGACCTG   180
GGCGCCAGCA GCCTGCACGT GAATGGGGAG AGCCTGGAGA TGGACTCAGA TGAGGACGAC   240
TCAGAGGAGC TCGAG                                     255

```

(2) INFORMATION FOR SEQ ID NO:796:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 267 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:796:

```

CTAGTCTTCC AACCTTCTG GACTTCTTT GCTCTGTCT TGTTTGGGT GTACTGGATC   60
ATGACACTTC TTTTCTTGG CACTACCGGC AGTCCTGTC AGAATGAGCA AGGCTTTGTG   120
GAGTTCAAAA TTTCTGGCC TCTGCAGTAC ATGTGGTGGT ACCATGTGGT GGGCCTGATT   180
TGGATCAGTG AATTTATTCT AGCATGTCAG CAGATGACAG TGGCAGGAGC TGTGTAACA   240
TACTATTTTA CTAGGAAGT ACTCGAG                                     267

```

(2) INFORMATION FOR SEQ ID NO:797:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 185 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:797:

```

GAATTCGGCC TTCATGGCCT AGGGGGAGTT TAGCTGAAAC AAGTTTACA GAAGCAGAGC   60
TGGCAATAG TTAATATATT AATTGGTTAC AATAGCAGT ACAAAACAA TAAACAGTTC   120
CAGGTGCAGG GGCTTAACT ATCACAAGA GAGAAATGCA GGGGTTTGC GTGACATTCA   180
CCGAG                                     185

```

(2) INFORMATION FOR SEQ ID NO:798:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 434 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:798:

```

GGGCGTGTGA CGACTGCTGG GAGAGGAAAG CGAGACATCA TTCCAACCT CCAGAAGCTA   60
AAGATCCTGG AACTCAAGGG GAAACTAAC GTAAGTCCGA AAGCGAACAA GCAACATGT   120
CCTCAACGGG GCAGGCAGGC TGTGGGGTA CAGAGCTGGG ATCTGGGAAG GAACAGAGAG   180
GGCCGCTCAG GGAGAGGAAG CACAGTGCCA CCGGAGGCAC GCACTCAGCA GGCACCTGCA   240
GGCTGGGCAG AGGTAGAGAA GCAGCGCTGC ACAGGCAGGC AGCTGACCCA GGGCTCTTAG   300

```

AGCCGGGCGAG GAGAGCTGGT GTGGGACCTG GGAGGAGGAC AGGAGCCCTC AAAGCAGCAC 360
CGCCTGATTG CAGCCAGGAG GGTAGCATCA AGGAAGATGG AACTGCGGCC AGGCCACATC 420
CAGGGGTGCT CGAG 434

(2) INFORMATION FOR SEQ ID NO:799:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:799:

AAAAAGTCGG ATGCTGGCCT CTGGAAATCA GCCAGATCAA GATATTACAC ATTTCTTCCA 60
ACAGATCCAG GAGCTCAATT TGGAAATGGA AGACCAACAG GAGAACCTAG ATACTCTTGA 120
GCACCTGGTC ACTGAACTGA GCTCTTGTGG CTTTGCCTG GACTTGTGCC AGCATCAGGA 180
CAGGGTACAG AATCTAAGAA AAGACTTCAC AGAGCTACAG AAGACAGTTA AAGAGAGAGA 240
GAAAGATGCA TCATCTTGCC AGGAACAGTT GGATGAATTC CGGAAGCTGG TCAGGACCTT 300
CCAGAAATGG TTGAAAGAAA CTGAAGGAG TATTCCACCT ACGGAAACTT CTATGAGTGC 360
TAAAGAGTTA GAAAAGCAGA TTGAACACCT GAAGAGTCTA CTAGATGACT GGGCAAGTCT 420
CGAG 424

(2) INFORMATION FOR SEQ ID NO:800:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:800:

GAATTCGGCC TTCATGGCCT AGGGGTGCTG TGTGTTTTTC AGGGCGCCCT GCGTCCGGCA 60
GAGGAGGCGA GCATCCCCTC CAGGTGATGA GGAACCCCTC GCGCACCCAG CGCAGAAGGC 120
TGCTGCCGCC GGACGCCTCC ATTGTTTAC CACAACAAGG GCCGGATTCT CACCCAGCAG 180
GATCCTAAGG CCTTTGTAGT CCTTCAGCCA CTGTGGGCCG TGCCTCTGCC TGTCTTTCTG 240
GAATGTCTTG GGGGTTTTGA TCCTGTCACT GTGACCTGCA AATCCAAGAG ACAACTCGAG 300

(2) INFORMATION FOR SEQ ID NO:801:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:801:

GAGAAATCAG TGAAGGATTT GCAACGCTGC ACCGTTTCTC TAACTAGATA TCGGTCATG 60
ATTAAGGAAG AAGTGGATAG TTCCGTGAAG AAGATCAAAG CTGCCTTTGC TGAATTACAC 120
AACTGCATCA TTGACAAAGA AGTTTCATTA ATGGCAGAAA TGGATAAAGT TAAAGAAGAA 180
GCCATGGAAA TCCTGACTGC TCGTCAGAAG AAAGCAGAAAG AACTAAAGAG ACTCACTGAC 240

CTTGCCAGTC AGATGGCAGA GATGCAGCTG GCCGAAGTCA GGGCAGAAAT TAAGCACGGT 300
CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:802:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 263 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:802:

GCTCGCGGCC GTTCAGAATT ATAAGGCTGT CTGCAGAGAT TTGAAAAATG GCAACAAATG 60
 AAAGTGTCAG CATCTTTAGT TCAGCATCCT TGGCTGTGGA ATATSTAGAT TCACCTTTAC 120
 CTGAGAATCC TCTGCAAGAA CCATTAAAA ATGCTTGGA CTATATGTTG AATAATTATA 180
 CAAAGTTCCA GATTGCAACA TGGGGATCCC TTATAGTTCA TGAAGCCCTT TATTCTTAT 240
 TCTGTTTACC TGGATGTCTC GAG 263

(2) INFORMATION FOR SEQ ID NO:803:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 276 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:803:

GAATTCGGCC TTCATGGCCT AAATAGTTAG TCACCTTCTG ACCTTCTCCT CTTTCTCAAA 60
 GCCTTCTGTC CCTGGTTTTT GCAAGTGCTG CATTCCGCC GAGAATCCGC GTTGCTTACT 120
 GCTGCCACCT CCTGTTTATT TAGAACTATG CAAAGACTCC GCTTCCGTTT TCCTGAGCTC 180
 CTCGGGCCCC AGAGTCTCTG TTTGATTATT TATTATTATTA TTTATTTATT TGCCAAAAAT 240
 TCTCCTCTTC AACTTATAGA ATGCACCCAA CTCGAG 276

(2) INFORMATION FOR SEQ ID NO:804:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 580 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:804:

GAATTCGGCC TTCATGCCTA CAGCCATATT AAAACTAAGT AAACCTCGTC CTGGGAAGTA 60
 CACTTTCAGC TTGACTGTAG TAGACTCTGA TGGAGCTACC AACTCTACTA CTGCAACCT 120
 GACAGTGAAC AAAGCTGTGG ATTACCCCC TGTGGCCAAC GCAGGCCCCA ACCAAGTGAT 180
 CACCCTGCCC CAAAAGTCCA TCACCTCTT TGGGAACCAG AGCACTGATG ATCATGGCAT 240
 CACCAGCTAT GAGTGGTCAC TCAGCCCAAG CAGCAAAGGG AAAGTGGTGG AGATGCAGGG 300
 TGTTAGAACA CCAACCTTAC AGCTCTCTGC GATGCAAGAA GGAGACTACA CTTACCAGCT 360
 CACAGTGACT GACACAATAG GACAGCAGGC CACTGCTCAA GTGACTGTTA TTGTGCAACC 420
 TGAAACAAT AAGCCTCCTC AGGCAGATGC AGGCCAGAT AAAGAGCTGA CCCTTCTGT 480

GGATAGCACA ACCCTGGATG GCAGCAAGAG CTCAGATGAT CAGAAAATTA TCTCATATCT 540
CTGGGAAAAA ACACAGGGAC CTGATGGGGT GCAGCTCGAG 580

(2) INFORMATION FOR SEQ ID NO:805:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:805:

CAAATTGATT TCGGCACAGT TCTGGGAGCT GGGACATTCA AGGTACCAC GTTGCCACCT 60
GTGAAGGCCT TCTGCTGCAT CCTCATGTTG GGGAAAGATCA GAAGTGAGAA CACATGCTGG 120
CCAGTCCTTT CACAGCAGCA TCAATCCGTG CATGGGGCAG GGCCCTCGGC CTGAGCGCCT 180
CCCCCAGGCC CTAATCCCA GCACTGCCCT GCTGGGGATG GAATTCCAA CATGAATCTG 240
GGGGATGCTT TCGGACCACA GCCGGGAGC CTGCCCTGGC TTCCAGCTGC TGGTGGCCCA 300
GGGGCTCCCT GGCTTGCTC GAG 323

(2) INFORMATION FOR SEQ ID NO:806:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:806:

GCGATTGAAT TCTAGACCTG CCATTCTCGC TCTGCCGAGG TTGACTCTCT CTCTGAATCC 60
AGTCCCAACT CCAGCCCTGG CCCCTGTCCT GAGAAGGCC CACCACCCCA GAAGCCACAG 120
CATCTCCAG GGGGCCCTCA TCGCCATCGT CTGCAACGGT CTCGTGGGCT TCTTGCTGCT 180
GCTGCTCTGG GTCATCTCT GCTGGGCCTG CCATTCTCGC TCTGCCGAGG TTGACTCTCT 240
CTCTGAATCC AGTCCCAACT CCAGCCCTGG CCCCTGTCCT GAGAAGGCC CACCACCACT 300
CGAG 304

(2) INFORMATION FOR SEQ ID NO:807:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 556 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:807:

GAATTCGGCC TTATGGCCT AGATATGAGA AATGAGTGTG GGACGTCGAA GAATAAAGTT 60
GTGGGTATC CTGATGATGG CAAATGTCTT CATTTATTTT ATTATGGAAG TCTCCAAAAG 120
CAGTAGCCAA GAAAAAATG GAAAAGGGA AGTAATAATA CCCAAAGAGA AGTTCTGGAA 180
GATATCTACC CCTCCCGAGG CATACTGGAA CCGAGAGCAA GAGAAGCTGA ACCGGCAGTA 240
CAACCCATC CTGAGCATGC TGACCAACCA GACGGGGGAG GCGGGCAGGC TCTCCAATAT 300
AAGCCATCTG AACTACTGCG AACCTGACCT GAGGGTCACG TCGGTGTTAA CGGGTTTAA 360

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CAACTTGCCG GACAGATTTA AAGACTTTCT GCTGTATTG AGATGCCGCA ATTATTCACT    420
GCTTATAGAT CAGCCGATA AGTGTGCAA GAAACCTTTC TTGTTGCTGG CGATTAAGTC    480
CCTCACTCCA CATTGTGCCA GAAGGCAAGC AATCCGGGAA TCCTGGGGCC AAGAAAGCAA    540
CGCAGGGAAC CTCGAG                                         556

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(2) INFORMATION FOR SEQ ID NO:808:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 359 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:808:

```

GGAAACTTCT AAATATTTT GCTCGCACT TTTACAACAT GAGAATGTTA GCCTTATTG    60
TCGCATTTGC TATCAATTC ATCTTGCTCT TTTATAAGGT CTCCACTTCT TCTGTGGTTG    120
AAGGAAAGGA GCTCCCCACG AGAAGTTCAA GTGAAAATGC CAAAGTGACA AGCCTGGACA    180
GCAGCTCCCA TAGAATCATC GCAGTTCCT ATGTACTAGA GGAGAGCAGC GGCCTACATGG    240
AGCCCAAGTT GCGTATCTTA GCTATTCTGC ACACGGTCAT TTCTTTCTTC TGCATCATTTG    300
GATACTACTG CTTGAAAGTC CCATTGGTTA TTTTAAAGCG AGAAAAGGAA GTGCTCGAG    359

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(2) INFORMATION FOR SEQ ID NO:809:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:809:

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GAGANACGAC AATGTCCAGG AAACAGAACC AGAAGGATTC ATCAGGATTC ATTTTGTGATT    60
TGCACTCCAA TACCGTACTG GCCCAGGGAG GAGCTTTTGA GAACATGAAA GAGAAGATAA    120
ATGCGGTACG TGCAATAGTT CCTAATAAGA GCAACAATGA AATTATCCTG GTTTTGCAGC    180
ACTTTGATAA CTGTGTGGAC AAAACAGTAC AAGCATTCAT GGAAGGTAGT GCCAGTGAAG    240
TACTCAAAGA ATGGACAGTA ACAGNCAAGA AAAAGAACAA AAAGAAGAAG AAACCTCGAG    299

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(2) INFORMATION FOR SEQ ID NO:810:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 413 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:810:

```

GAATTCGGCC TTCATGGCCT AGTAGCTGTT CCAGTACAAT TCAATGTTAT CCAGGTTGGG    60
TGCAATGTGA ATGATATTTT TGTACTTTTG TATCAACTCA GAATTCCAG AGAGCTCTTC    120
CTGGCTGAAA AGATGTCCAA GGATCATCTC CGGAATGGAA GAGGTGAGGC CTGTTAGCTT    180
GTGGGCTGCC CAATCCATCC AACCCCTGGC ATTGGGATCA ATGTTGATGA GGACAAGACC    240
TTCAACAGTG TCCGGGTGGT TAAGAGCATA TCTCGCCAGG ATGTAGGCTC CAGCTCCAAC    300

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ACCAACTCCA ATTATTGTAG AGAAATTTAG GTACTGCAGG ACGCAAGGGA TCATGTCTGC 360
 AAGCTGGTCC AGAGATGGGT ACTGATATCC CAAAGGGAAC ACAGGGGCTC GAG 413

(2) INFORMATION FOR SEQ ID NO:811:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:811:

TTGGTATTGT CTCTGACTA GTCTTTCCAA ATTCTGCTGT GAGCTTTTTG CTTAGACTGT 60
 AAGCCTTAGA GTCATCATC ACAGTAATCC TAAAGACAGA TTTTCTGTT CTATTGATA 120
 AGGCCTTTT GTGGGTGTG CCGACTGTCA GTTTCATGTT TGTTGTGTTG TTTTGGAACT 180
 GCAGTTACAT CCAGGAGACC TGTGGTGAGC ATAATGGGCT GTAGTTGTG CAGTTGTCAG 240
 TATAGCTTGT TAGGGAGCTC TTCCTGGGCA GAGTCTTGCA CAGCAGAGCC CAGTGCTGAG 300
 CTGAGTTCTT GGCACCATCT CGAG 324

(2) INFORMATION FOR SEQ ID NO:812:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:812:

ACATTTCCTT GTAAGTNNN AAAAGCCTAT GAGGGTTTTT TCCACGATTC CGTTCACAGT 60
 TTGGCTTTTG TTGTTGTTGT GGCTGTTCTT GGCCCCCTG GGCCCTGCAT TGGAGTGGGG 120
 GGCTGCACCT GGGAGCCTCG AGCTGAGGCC CAGCCCCCTC TGCCCTGCAT TTTCTGCCA 180
 AGCAGCACCT GAGACTCTGA AGCCGATGCC TATACAGGCA GAAACCTGCC AATTCCAGCT 240
 TGAACGACTG GAGGGTCTG AGGATGGGGG TCCCTGGGGT GCCATCATGG CAGGGGTGCA 300
 TCTGTTTGGG TATGCTGCCC CCCAGCTGGC GGGGCACCGG GGACAGCTCG AG 352

(2) INFORMATION FOR SEQ ID NO:813:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:813:

GAATTCGGCC TTCATGGCCT AGGGAAAGGG AANGTGGGGA GGGTCCGAGG GGAAGGGGAC 60
 CCCAGCTTCC CTGTGCCCCG TCACCCCACT CCACCAGTCC CCGTCCGCCA GCCGGAGTCT 120
 CCTCTTACC GCCACTGTCA CACCGTAGCC CANATGGATA NCACNGTTGT CAGACAAGAT 180
 TCCTTCAGAT TCCGAGTTGC CTACCGGTTG TTTTCGTTGT TGTGTTGTT GTNTTNTTT 240
 TTNTTTNNN TNCGAAGAC AGCAATAACC ACAGTACATA TTA CTGTAGT TCTCNATAGT 300
 TNCACATACA TTNATACCAT AACCTCGAG 329

(2) INFORMATION FOR SEQ ID NO:814:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:814:

GAATTCGGCC TTCATGGCCT ATCCATTTC AAATCCACCA AGGTCCAGTC GACAGACATT	60
TCCAAAAGA ATCCTGTTCT AGGACCACTT GCGCTGAGAG CACACCCGGG GGTCAAAGGG	120
CAGCCACCGG GGGTCAAAGG GCAGCCATCA GGTACTCCCC AGGGAAGGGC TTGCGGCCAC	180
CAGTCACTGC AACCCCGCCT CACCTCCGAT GCCTGCTGTG CCCAGGGTGG TCCCGCTCAT	240
AGCGACGGCC TNGCGTNCA TANGACCTCG AG	272

(2) INFORMATION FOR SEQ ID NO:815:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 584 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:815:

GATTGAATTC AATGTTAAGC ACCAATGCTG GATTGGTGG TGGACTGAAC ACCAGTGCTG	60
GCTTTGGTGG TGGCCTAGGC ACCAGTGCTG GCTTCAGTGG TGGCCTAAGC ACAAGTTCTG	120
GCTTTGATGG TGGGCTAGGT ACCAGCGCTG GCTTCGGTGG AGGACCAGGC ACCAGCACTG	180
GTTTGGTGG TGGACTGGGC ACCAGTGCTG GCTTCAGTGG CGGACTGGGC ACCAGTGCTG	240
GCTTTGGTGG TGGACTGGTC ACTAGTGATG GCTTTGGTGG TGGACTGGGC ACCAATGCTA	300
GTTTCGGCAG CACACTTGGC ACCAGTGCTG GCTTTAGTGG TGGCCTCAGC ACCAGCGATG	360
GCTTTGGCAG TAGGCCTAAT GCCAGCTTCG ACAGAGGACT GAGTACCATC ATTGGCTTTG	420
GCAGTGGTTC CAACACCAGC ACTGGCTTTA CTGGCGAACC CAGCACCAGC ACGGGCTTCA	480
GTAGTGGACC CAGTTCTATT GTTGGCTTCA GCGGTGGACC AAGCACTGGT GTTGGCTTCT	540
GCAGTGGACC AAGCACCAGT GGCTTCAGCG GCGGACCGCT CGAG	584

(2) INFORMATION FOR SEQ ID NO:816:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:816:

GAGAATGTCC AGCAAGGAAG TGAAGACTGC TCTAAAAAGT GCTAGAGATG CAATCAGAAA	60
CAAAGAATAC AAAGAAGCTT TGAAACACTG TAAGACAGTG TTAAAGCAAG AGAAAAATAA	120
CTATAATGCC TGGGTTTTTA TTGGCGTTGC TGCAGCTGAA CTAGAACAAC CTGATCAGGC	180
CCAGAGTGCC TATAAAAAAG CTGCTGAATT AGAGCCAGAC CAATTACTAG CTGGCAGGG	240
GTTAGCAAAC TTGTATGAGA AATATAATCA CATAAATGCT AAGGATGACT TGCCTGGTGT	300
TTACCAAAAAG CTCCTGGATC TTTATGAGAG TGTGACAAG CAGAAGTGGT GTGATGTCTG	360

CAAGAACTT GTGGATCTAT ATTACCAAGA AAAGAAACAC CTAGAGGTGG CTCGAACATG 420
GCACAAGTTG ATAAAAACAC GGCAGGAACA AGGTGCAGAA AATGAAGAGC TTCATCTCGA 480
G 481

(2) INFORMATION FOR SEQ ID NO:817:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 209 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:817:

GAATTCGGCC TTCATGGCCT AGGGGGAGTG GTGGGTATTG CTAAGTTATC AGTTATTTAA 60
CCTTATGGAG TTTTATTTAA CCGTTTTTGT TTGACATGTT TTATATATAT GTAATTTTAT 120
TTATTCTTCA CAAATCCCT GTGAGGGGGG TGGTACTATT GTCCCCATTT AAAGATGAGA 180
ACACTGAGGC ATGTCTAGAA TTCATCGAG 209

(2) INFORMATION FOR SEQ ID NO:818:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 220 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:818:

GGCTCTGTGG AATTCCATGG CATCTCCCC GCCCCCCCCA ACCCCCCCTT TCCCCCTTC 60
TTTTTTTTTT TTTCTTTTCT TTTCTCCCTT CCCCCCTT CACCATTTC CCTCGGAGGC 120
GCTTTCCCG GGCAGGGGCA GAGCGGTCT CACCCCCGC CTCTCCCCGG CCCCCCGGC 180
CCTATGGCGA GAGGGAGCCC CCTCCAACC CGGGCTCGAG 220

(2) INFORMATION FOR SEQ ID NO:819:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:819:

GAATTCGGCC TTCATGGCCT ACACATTCCT TTAGTCAGAA ACATTAAAT AGTAGAGTAA 60
GTTGGCTTGA AGTGAATTT TGTGTGAAAT CTTTCTCTG CCCTAGCCTA GTTGTCCAT 120
GCACATTGC ACACAGGAAG AACATTTTGA GACCTGCCAG AATATGCAAT GACAGGTAA 180
AAATGCCCG AGGTGACTG TGTTCATAGA CATTGTGCTA AACACTCAAC ACTCCTGATC 240
ACACTGAATG CTTTGTACAG TCCTGTGAAT TGAGGGCTAT TATTATCCCC ATTTTATATA 300
TGAGCGAGCA GAGGCCAGA CAGATTACA AAGGTGCTCC CTCGAG 346

(2) INFORMATION FOR SEQ ID NO:820:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:820:

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GCTTATACAG TGTCCGATAG ACACCAGGAA GCNACTAGCA GAGAATTTGG TAGTCATAGG      60
TGGCACTTCT ATGTTGCCAG GATTTCCTCA CAGATTGCTT GCAGAAATAA GGTATTTGGT      120
AGAAAAACCA AAATATAAAA AAGCACTTGG CACTAAGACA TTTCGAATTC ATACTCCACC      180
TGCAAAAGCT AATTGTGTGG CCTGGTTGGG AGGGGCTATT TTTGGAGCAT TACAAGATAT      240
ACTTGGGAGC CGTTCGTGTT CAAAGGAATA TTATAATCAG ACGGGCCGTA TACCTGATTG      300
GTGTTCTCTC AATAACCCAC CTTGGAAAT GATGTTGAT GTCGGGGAAC TCGAG          355

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(2) INFORMATION FOR SEQ ID NO:821:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:821:

```

GCTCGAGGGC GAAGGGGAGC AATGGCATTG GCGTTGGCCA TCCGTGACAC GGCATCCTAT      60
GCTCGCCAGA TGATGTTACG GACCACCCCTT CTCATTGTGT TCTTCACTGT CTGGATCATT      120
GGAGGAGGCA CGACACCCAT GTTGTCTATG CTTAACATCA GAGTTGGCGT CGAGGAGCCC      180
TCCGAAGAGG ACCAGAATGA ACACCACTGG CAGTACTTCA GAGTTGTGTG TGACCCCGAT      240
CAAGACCCAC CACCCAACAA CGACAGACTC GAG                                273

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(2) INFORMATION FOR SEQ ID NO:822:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:822:

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GAGATAAACA AAATTGATTG CCCCATTCTC TCACTTCCCC ATCTTGCTCT CCTAGACCCC      60
ACAGAGTTAA AACTTGGGAT TCCCCTGGCC CCCCAGAAC ACTTGATAT TGTTGTTTG      120
AGGTTTCTGC CGCAGTAACA GACACAGTAT TTAATTGCAC ATACAGATGT TTGCTGGGTA      180
TATTCAGTGT AAATTTTATT TAATCTGTTT TTTTGTGTTG TTGGGGGTTA TTTGGGGGGA      240
GGTTGGTTTT GTTTTAAAT ATAAAAAAA AAATCTGTCA CTCGAG          286

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(2) INFORMATION FOR SEQ ID NO:823:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:823:

GGTCTGGAGG AGGCCCGGAG GGGCTGTGGG TGGACCACTG CAGTAATCTG GGTGAAAGAT	60
GATGATAGGC TAGACTAATA TGGTACCAGA GACAAAGAAG AGGGACTTGA GAGTTATTTA	120
GGAGGAAAAA AACAAACAA AACAAAAATC AACCAGACTT ACGTTTTGAA ATAGGACAAG	180
TGAGGAAAAG GAGGGTTTCG AGAATAGCTT ATAGTTTTCG AGAAGATGAG GTTGGACAAG	240
ATGCCACTGC TTTTCTTAGC ACTCTTCCT CCCCTAAACC ATCCCGTAGT GCTCGAG	297

(2) INFORMATION FOR SEQ ID NO:824:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:824:

GAATTCGGCC TTCATGGCCT ACCCTCATTAAAAAGTGC CTCCTAATGG ATCTGTCCTT	60
ATTCTTCCTT GTTCTGTCTC CCTCATGCCC TGGAGCTCCT CTCTTTGGGA CCTTCCTCTC	120
CCAAGTCACC ACCCTCTCTC CCCTTCTACC ACTCAGCCAT TCCCCAGTTT CCACAGTTCC	180
TCAAACATTA CCCCACTCCC CACTCCCCAG TTTCTCCCC CTCCCCATTT GTCCCCCTCA	240
CCTGGGGGTC CCCGAAGTAG ATCTGCAG	268

(2) INFORMATION FOR SEQ ID NO:825:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:825:

GAATTCGGCC AAAGAGGCCT AGATGTGAGC TGGGGAAGGG AGGGTGGCCA GTAATGGGTT	60
TGTTATCAAG CAGGTTTGTT ATCACTGTGG GTGACAAGCC CCTTCCCATT TGGGGCCTCT	120
GGGATCCAGT GCAGAACATA TCCCTCGCAG GAGATGAGGA ACTGGGGTGT TCACAGAGTA	180
ATTCCCTCCC TCACTAGTTG AGGGCTGCCT CTGGGGGTGG CTGAACTACC TCATGCAGCC	240
AGAGAAAGTC CTCAGGCAAT GAAATACAGA CACTGGCCAG CCAGCACTGA GGTGGCGAGA	300
CCTTACTGGC TGGTCCCCAG AGTGTCTGCA GCATTGTGTG AGATCTTAAA CTGGCTAGAA	360
GGACGGTAAC AGCAGCACCT GTTTCATAGG ACGTGAAGAT AGACGAGACA G	411

(2) INFORMATION FOR SEQ ID NO:826:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:826:

GAATTCGGCC AAAGAGGCCT ACTAAAACCA TAATTGCTTG TTTTGCCTG TATCTGTCTT	60
TTCACGAACA TTTTGAGTTT AGCTCTGTCT TACATTCCCA TCCCTAAAGA TCATCAGGAC	120
TTTTGTTTTT GTGACAATGC TGGGACCAGA TTGGCCTTCA TCATCTCATA ACACCCTTAT	180
TTCTATGGA AAAGTAAAT TGAATTATC CAGATATGAT GACTTTAGGA TATCCTTTTC	240
CCTCTGTAC ATCCTTCATT GTATTTGTGT TTTCCCTTTG GTCTCCAACG TCCCACCAC	300
CCCCAATCCC TCCACGACTT TTAAGCCCTT GGAAGCCAAC TTGATTAGTC AGG	353

(2) INFORMATION FOR SEQ ID NO:827:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:827:

GAATTCGGCC AAAGAGGCCT ACCGTGAGTT CCCAGGGTGG CCGGGAGGGG GAGCTGCGGG	60
GTTCACAGCG GCTCCTCTCA ACGTTCTGG CTCGCTCCC GACTTCTCAG CCCTGCCTGG	120
AGGGGCTCAG CCACTGCTTT TAGCTGTCTG CTGGCTTTCC ACCCTTCCAG CCTGAACCTT	180
GACTTCCCA TGAGGCCTTC CTGTGGCGGG GACACTCCAG GTCGCTGCAC CCCTTCTCTC	240
CTGAATTCT GTAACGACAT CTAACTTTAA TTTAATTAAT TTATTATTT AGAGATGGAG	300
TTTCTCTCT GTTGCCCCGG CTGGAGTGCA ATGGCACCAT CTTGGCTCAC TGCAACCTCC	360
GCCTCCAGG TTCAAGTGAT TCTCCTGCCT CGGTCTCCTG AGTGGCTGGG ATTGCAGGCA	420
CCCATCTG	428

(2) INFORMATION FOR SEQ ID NO:828:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 144 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:828:

GAATTCGGCC AAAGAGGCCT AAGCGGTATT TCAGCCACAG AGTTGGTGTT GGGTTTACTT	60
ATCTATTTTG AATTTAAAG GCTTATAAAT AAAGCAGTGA CACTGCTTAC TGGGAAATGC	120
TGTACCAAAA AATGTTATCT TGCT	144

(2) INFORMATION FOR SEQ ID NO:829:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 95 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:829:

GAATTCGGCC AAAGAGGCCT AGCGGACTAG GAGTCAATAA AGTGATTGGC TTAGTGGGCG 60
 AAATGTTATG CTTTGTGTT TGGATATATC TGGAG 95

(2) INFORMATION FOR SEQ ID NO:830:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 610 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:830:

GAATTCGGCC AAAGAGGCCT AGTGGCTACC TAAATTGAGT ATCTGGCAAG AGTAAGATTA 60
 AGCAGTAATT TGTTCCAAAG AAGAATCTTC TACCAAGGAG CAACTTTAAA GAATGAAATT 120
 AACTTTCTTC TTGGGCCTGT TGGCTCTTAT TTCATGTTTC ACACCCAGTG AGAGTCAAAG 180
 ATTCTCCAGA AGACCATATC TACCTGGCCA GCTGCCACCA CTCCACTCT ACAGGCCAAG 240
 ATGGGTTCCT CCAAGTCCCC CACCTCCCTA TGAACAAGA CTTAATTCAC CACTTTCTCT 300
 TCCCTTTGTC CCAGGGCGAG TTCCACCATC TTCTTTCTCT CGATTTAGCC AAGCAGTCAT 360
 TCTATCTCAA CTCTTTCCAT TGGAACTAT TAGACAACCT CGACTCTTTC CGGGTTATCC 420
 AAACCTACAT TTCCCACTAA GACCTTACTA TGTAGGACCT ATTAGGATAT TAAACCCCC 480
 ATTTCTCTCT ATTCTTTTT TTCTTGCTAT TTACCTTCCT ATCTCTAACC CTGAGCCCCA 540
 AATAACATC ACCACCGCAG ATACAACAAT CACCACAAAT CCCCCACCA CTGCAACAGC 600
 AACCACCAGC 610

(2) INFORMATION FOR SEQ ID NO:831:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 564 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:831:

GAATTCGGCC AAAGAGGCCT AGGAAGAAAC AAGAACAAGA AAAAAGATTA TATTGATTTT 60
 AAAATCATGC AAAAAGTCA ACTCTGTGTT TATATTTACC TGTTTATGCT GATTGTTGCT 120
 GGTCCAGTGG ATCTAAATGA GAACAGTGAG CAAAAGAAA ATGTGGAAAA AGAGGGGCTG 180
 TGTAATGCAT GTAATTGGAG ACAAACACT AAATCTTCAA GAATAGAAGC CATTAAAGATA 240
 CAAATCCTCA GTAAACTTCG TCTGGAAACA GCTCCTAACA TCAGCAAAGA TGTATAAGA 300
 CAACTTTTAC CCAAAGCTCC TCCACTCCGG GAACGTGATTG ATCAGTATGA TGTCCAGAGG 360
 GATGACAGCA GCGATGGCTC TTGGAAGAT GACGATTATC ACGCTACAAC GGAAACATC 420
 ATTACCATGC CTACAGAGTC TGATTTTCTA ATGCAAGTGG ATGGAAAACC CAAATGTTGC 480
 TTCTTTAAAT TTAGCTCTAA AATACAATAC AATAAAGTAG TAAAGGCCCA ACTATGGATA 540
 TATTTGAGAC CCGCCGAGCT CGAG 564

(2) INFORMATION FOR SEQ ID NO:832:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 424 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:832:

GAATTCGGCC	AAAGAGGCCT	ANTCTGTGA	GATTTCCTCC	TTTAGTTCC	AACCTTCTCC	60
CCACCTACTC	ATTTATCCAT	CCCTCCCACC	AACTCATTTA	TCCATCCCAC	CCACTCATTT	120
ATCCATCCAT	CCCACCCACT	CATTATCTG	TCCATCCCAT	CCACTCATTT	ATCCATCTAT	180
CCCACCCACT	CATTATCTG	TCCAACCCAT	CCACTCACCC	ACCTACTCAT	TTATCCATCC	240
CATTGCTTA	CCCATCCATC	TATCCCACCT	AACAATACAT	CCAACCATTC	CCTCACCTAT	300
GCATCTGTCT	GTTGAGCTGT	TCATCCATTC	ATTGATCTTT	CCATCCATTC	ATCCACTCAT	360
TCACACACCT	ACCTACCTAC	CCACCCGCTC	ATTTATTCAC	CCACCTACCC	TCTCATCCAT	420
CCAG						424

(2) INFORMATION FOR SEQ ID NO:833:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 383 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:833:

GAATTCGCCA	AAGAGGNCTA	GTCTACATCA	GCTAACTTTC	CTACAAGATT	ATCAAATTTT	60
ACACAGTATT	TTTCTGTATT	TAATGACTGC	CATGGTCTGC	AAAATTATGT	GATTAGACAA	120
TGAATGACGC	TTAAAGAATG	ATGACCTATT	TTCTAAAGTA	CACTCAAAAT	ATTAACTTTT	180
AGAGACAAAG	CAAAATCTAT	CATAAAGTTG	GCTTCTGTTG	ATAGAAACAG	AGAGGTAGGT	240
TAATAATCAC	TGTCCTAAGA	TAAGCNAGAA	TGCTTAGAAA	TAAAAGTTGA	GACCCCTGCTT	300
CAAAAAGAG	AAGTTGAACC	TTCCAGCCCT	GAGTTTCTAA	TATTACATGA	AAATTATGAA	360
AATGAGCATT	AAGCCAGTCG	CAG				383

(2) INFORMATION FOR SEQ ID NO:834:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 464 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:834:

GAATTCGGCC	AAAGAGGCCT	ACTACGTAGT	TGGAGCTNTT	TCTTCCCCCA	GCAAAGCCAG	60
AGAGCTTTGT	CCCCGGCCTC	CTGGACACAT	AGGCCATTAT	CCTGTATTCC	TTTGGCTTGG	120
CATCTTTTAG	CTCAGGAAGG	TAGAAGAGAT	CTGTGCCCAT	GGGTCTCCTT	GCTTCAATCC	180
CTTCTTGTTT	CAGTGACATA	TGTATTGTTT	ATCTGGGTTA	GGGATGGGGG	ACAGATAATA	240
GAACGAGCAA	AGTAACCTAT	ACAGGCCAGC	ATGGAACAGC	ATCTCCCCTG	GGCTTGCTCC	300
TGGCTTGTA	CGCTATAAGA	CAGAGCAGGC	CACATGTGGC	CATCTGCTCC	CCATTCTTGA	360
AAGCTGCTGG	GGCCTCCTTG	CAGGCTTCTG	GATCTCTGGT	CAGAGTGAAC	TCTTGCTTCC	420
TGTATTCAGG	CAGCTCAGAG	CAGAAAGTAA	GGGCTTACT	CGAG		464

(2) INFORMATION FOR SEQ ID NO:835:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:835:

GAATTCGGCC AAAGAGGCCT ACTGGGAGTT CGGAGTGATT GTTTCCTGTT ACAGGCCAAA	60
AAATTGTTT GGTACTTAG TGGTAGCATT TTGAGAGGAA AGTTTACAGA AAAC TAGGGT	120
TATTTGTGA TTATGCTTGA ATTGTCTTAA TTGTTTCCAA GGCATCTTTT TTTTTCCTT	180
CTAGTTATCA AGATGTTAGG TTCTGTGCCC TTGTGGGCCT TCCCTCTGCC CAAAAAAGC	240
ATGGATGAGC AGAGTAATAT CATTAAATG GCAGTCTTGT TTAGTTTTC TAGAAAAGAT	300
GGTCTCGAG	309

(2) INFORMATION FOR SEQ ID NO:836:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:836:

GAATTCGGCC AAAGAGGCCT AAGGCAGGTT TTTTTTCTA TGCTTATTGA TTTAGCCTAT	60
CTATTTATAA CAGTATAATT CAGAATATAA ATATGGAACA AGTTTCATAA GGAAGTTTAT	120
CTTTAACTCA GACATTATAT CATTAACTCT TCAAATCTCA TTATACCATT ATGACCTGAA	180
TGCTACATTT TTCTTCCTGT ATGGAGAGCT TAGGGAAAAA TTGTGGCCTG ATGCTCTCAT	240
CCATTCACTT ATCATAGAGT ACATAATGAT CTCAAATATC CAAAAATGGT TATATTGAGC	300
TGCATATTTT TAAGAAAACA GGCAGGACTC GAG	333

(2) INFORMATION FOR SEQ ID NO:837:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 706 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:837:

GAATTCGGCC AAAGAGGCCT AATTGATTTT CCATGAGTCT TGTAATCTTT GCTCTGCTGA	60
TTGCGTTTGC CGTCTCTAGA CCATCTCGCT TCGAACAAAT CGCAAAAGAG GTGAATTCCA	120
GAAGAACGAC CTGGATTGCA GAAGAATCGG CTCGGTTCG TGAATATGCT CGTTTGATGC	180
GTACCTTCC AAATACGGTC CCTCTCCGA GTAAGACTGT CGATGTCGTG AAGAACCCTC	240
CTGAGAGTTT TAACGCATTG GAAAAGTGGC CGGAATGCAA GTCCATCACG GAAATCCGTG	300
ATCAAGGAGA ATGTGCTTCA TGTGGGCAC TGGGGAGTGG CGGAGGTGGC CACGGATCGT	360
CTTTGCATTT CTTCCAACGG AAAGGATCAA TCCCGTCTCT CTGCCGAGGA TCTGTTGGGA	420
TGCTGTGACT CTTGTGGAAT GAAATGCAAG GGAGGGTACA CGGGGAATGG CCTGGGAGTA	480
TGTACGTCAG GTGGGAATTG TGACGGGTGG AGCGAATGGA AACAAAGGAAT GGTGTAATGA	540
GTACGCGTTC CCGAAGTGCA GTCACGGTAT TCAGGGCTCC TATCCTGAAT GCTCTTCCAT	600
CCCCCTGAA GATCCGAGT GTTCAACGAC TTGCATAAAG GGGTATCCCA TCCCATATGA	660
TCAGGACCGT CACAAAATGA AGTCAGCCTT CCAGCTGGCA CTCGAG	706

(2) INFORMATION FOR SEQ ID NO:838:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 480 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:838:

```
GAATTCGGCC AAAGAGGCCT ATAAAAGTCT TATTTTTTAC TTTGTCCACT GGAATACATC      60
ATCGTTGGCC TATCATTCCA AACTCCCTAC AGTGTGGCTT CAGCTTATCT CTCTCTGTTT      120
TTTACAGGAA TCCTAAACTC TAACCCAGGG ACCCTCAACA TCTGTGCTGG GTGGACTGTG      180
GCCACATTTT CAGCTGGCCA GTGTAAGGGT TTAGAGGCC CTTACATGAG AAGAAATACA      240
ATTTTTAAGT CTCTGAGATG ATGTGCTTCT TACATTTTGT GAATTAAAAT GCCTCTTTAC      300
TTATAAAATG CTGGTAGTAA TAGATGGTCA TTATCTCACT GTCATTGTGT AAAGAAAAAA      360
CGATTGTAAT AGAATTCTTG CTATTTTTTT TCTCTAAGGG AGGTAAGTTT TCTCCCTAAG      420
CAAACTTTAT GGAATGCACA ATGCTTGGCT TTCACCTTCT TTTATTCTCA CTACCACCGG      480
```

(2) INFORMATION FOR SEQ ID NO:839:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 589 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:839:

```
GAATTCGGCC AAAGAGGCCT AGAATTAAGG TGTATTATGA GCAGTTGAAG ATATATAGGA      60
AATTTTTTCC CAAACCACTA TCTCTGCTCG TTCTATTCAT TCAGTCTGTT TATGTTATTC      120
CTTCATTCAT TCATTTTATA GAACAGTGGA GTGCCTACTG TATGCATCTA TTGTTCTGGG      180
TCCTGGGGAA AGAAAACAAA GTTCCTGCTT TCATGGAACT TACATTATAT TGGCGGAGAC      240
AGTAACAGAC AAACAAATGT AGCCTGTGTA CATGTGTTAC ATGAAAAGCA GGGTAGGGGG      300
CTGGGAGAGA GTAGTAGGGA GTGCTATTTT CGAGGTGGTT GTCAGGAAAG GCCTCACTGA      360
GGAGGTGGCA TTTTGAGTAG ACCTGAGCGC AGCGGGGGCG TAAGCCCAGG CAGCATGTGG      420
AGGAAGAGTG TTCTTGTTGA AAGGAACAAG GATAGAGGCC CGAAGCTAGA GAGCTCAGCA      480
TGATCAAGGA ACAGCAAGCC CCGTGTGGCT GGAATGGAGT GAGCAAAGGA ATGAGCAGTA      540
GAAGGTGAGT GAGTTGGGAG GTCACCAGAG ACCATGGCAA AGACTCGAG      589
```

(2) INFORMATION FOR SEQ ID NO:840:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:840:

```
GAATTCGGCC AAAGAGGCCT AGGGACTAAC TGCAACGGAG AGACTCAAGA TGATTCCCTT      60
TTTACCCATG TTTTCTCTAC TATGCTGCT TATTGTTAAC CCTATAAAG CCAACAATCA      120
TTATGACAAG ATCTTGCTC ATAGTCGTAT CAGGGGTCGG GACCAAGGCC CAAATGCTG      180
TGCCCTTCAA CAGATTTTGG GCACCAAAAA GAAATACTTC AGCACTTGTA AGAACTGGTA      240
TAAAAAGTCC ATCTGTGGAC AGAAAACGAC TGTGTTATAT GAATGTTGCC CTGGTTATAT      300
GAGAAATGAA GGAATGAAAG GCTGCCAGC AGTTTGGCCC ATTGACCATG TTTATGGCAC      360
TCTGGGCATC GTGGGAGCCA CCACAACGCA GCGCTATTCT GACGCCTCAA AACTGAGGGA      420
```


GGAGATCGAG

430

(2) INFORMATION FOR SEQ ID NO:841:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:841:

GAATTTTAC TTGTCTATAG TCTAGTATTG TTATACCATG TGGTCTTGTT ATAATCATGG 60
TTTCCATTCT GTGAGTCTTC AGATTATAGG CCTCTTGGC G 101

(2) INFORMATION FOR SEQ ID NO:842:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 479 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:842:

GAATTCGGCC AAAGAGGCCT AAATGGCGTC GTGGCATTGA GGGGCATCCC TCCTAGAACC 60
TCCAGGAAAA GCTCGCGGAA GACGAGGTTT TCGCGAGAGA GAGGCTCCAA GCAGTCTGGG 120
AAGTGTAGTC CAGTTGGCTT AGCAGTAGTT TCGTTGGGGG GGAGCCGAGG TTCCGGGAAG 180
GGGCTAGGCC GGCTTGAAAA GAGATTATGA CTGTACCTTT TAACTTTGTA GCTGGAACAC 240
AAGAAGTGTT TGTTTAATGA ATGACGTACA CATTTAAGAT CTGTTTGAC GCGGAGGATA 300
ATCCTGTGAA TTGCTAATAG TTTACTGGGT TTGGCCCTTA GTGTTGACTT CAGTATGCTG 360
AGACGGAAAC CAACACGCCT AGAGCTAAG CTTGATGACA TTGAAGAGTT TGAGAACATT 420
CGAAGGACC TGGAGACCCG TAAGAAACAG AAGGAAGATG TGAAGTTGT AGGAGGCAG 479

(2) INFORMATION FOR SEQ ID NO:843:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 270 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:843:

TGAAGAGCT AACTCGTCTG GCCTTTGAGC TCTTTGCTGA AGAGCAAGCA GAGGGTCCCA 60
ACCGCTGCT GTACAAAGAC GGCTTCAGCA CCATCCTGCA CTGCTGCTG GGTTCACCCC 120
ACCTTGCTGC CACAGCTTTG CATGCTGAGC TGTGCCAGGC AGGATCCAGC CAAGGCCTCT 180
CCCTCTGTCA GTTCCAGAAC TTCTCCCTCC ATGACCCACT CTATGGGAAA CTCTTCAGCA 240
CCTACCTGCG CCCCCACAC GCATCTCGAG 270

(2) INFORMATION FOR SEQ ID NO:844:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 413 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:844:

```
GAATTCGGCC TTCATGGCCT ACACAGCCAG TATCAGAACC TCAAGAAAAC GAGGACACTG      60
GGGACAGGGA CCAAAATTCA GACCACTTTT TTCTCTTGCC TTTCAATAGG ATATTCTGTT      120
AATTGAATTC ATCTGAAAAT CAAGGTCATT GCAGAGAAGT CAGCATTCTA GAGCACAGAA      180
CAGGGCAAAA CAGGACGAAA GATGGATTG GAGACCAAAT GGAGAAGGAA GAACAGAGAT      240
ACGTGTGCTC CAAATATGAC ACCCAACTTC TTTACTCAGA GCAGTTACAT GTCAGATTAT      300
ATTTTAGTTT TTCATTCTC CTATAGGCAT ACATACTACA AGTCTATAAT AGAAAAC TAG      360
TGGCTGGGCG CGGTGGCTCA CGCCTTAAAT CCCAGCACTT TATGGCGCTC GAG      413
```

(2) INFORMATION FOR SEQ ID NO:845:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 126 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:845:

```
GAATTCGGCC TTCATGGCCT AGGCTCTGTC TACCAAAAAA AAAAAAAAAA GAAAGAAATC      60
TTGCAGTCTG AATACATGGT TGTGTTCTTA AGAAACCTGG TGATAACAAC GACAAAAC TC      120
CTCGAG      126
```

(2) INFORMATION FOR SEQ ID NO:846:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 269 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:846:

```
GCTTCATGGC CTAGTTGAAT AGTCAGTTAG AAATGGAAAG AATGAAAGTT GAACAAGAAA      60
GACAAAGCCT TAGAACAAAA GACACAGCCC TAGAACAGAA GGACAAGGCC CTGGAACCAA      120
AAGACAAAGA CTTAGAAGAA AAAGACAAGG CCCTGGAACA GAAGGATAAG ATTCCAGAAG      180
AGAAAGACAA AGCTTTAGAA CAAAAGGGCA GAGACTTAGA GCAAAAAGAC ACAGCCCTAG      240
AACAGAAGGA CAAGGCCCTA GAACTCGAG      269
```

(2) INFORMATION FOR SEQ ID NO:847:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 264 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:847:

```

GCGATTGAAT TCTAGACCCA CCTTCAGACC ATCTCGGAAG ATCTAAAAAG CCTGACCATG      60
GACCCTCACA AACTGCCCTC CTCAAGTGAA CAGGTGATTC TGGACTTGAA AGGTTCTGAT      120
TACAGCTGGT CGTATCAGAC GCCACCTCT TCCCCAGCA CCACCATGTC CAGAAAGTCC      180
ACTGTCTGCA GCAGCCTGAA CAGTGTCAAC AGCAGTGACT CCCGGTCCAG CGGCTCCAC      240
TCGCATTCCC CCAGATTCT CGAG      264

```

(2) INFORMATION FOR SEQ ID NO:848:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:848:

```

GAATTCGGCC TTCATGGCCT AGAACATTCC AAATTTTCTT GGTTCATA CCCTTTTTTT      60
TCTTTTGAGG GGAAAAGAGG GGAGAAAAAC AGGAGTGATG TCATTCTTT TTCATGTATT      120
CCAATTAAAG AAACAAGGGC AGGTCGTATA ATGGCATATT AATACATTAG ACTTAATCTA      180
GAACCCCTGT AGCTTTTGA TGTGTTTAT TTCTTATCTC TTGAATTCC TGTTTGGTTA      240
CTTGGCTTCC AATGGAGGTG AACTTAACAA CCATACTTGA ATATTCCGTC TTGACTTTGT      300
AAACTGTGC TACTTGAAAT GAAGTTTATC TGGGGTCTCG AG      342

```

(2) INFORMATION FOR SEQ ID NO:849:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:849:

```

GAATTCGCCT TCATGGCCTA GGTATTCTA TTATTTGTAG CTGAAATAAT TCCTGGCACA      60
AATGACTTTG AAATTTATCT CTGAACATCC CAAATTCATT ATTAGCAAAT ATCAGAAACT      120
TCACATCACT CCAGTCTGTT ATTTACATG GTTTTCTTAG GGCCTGGAAA GTTTTACAG      180
CTGGCTTTTA TTGACTGTGG TGGCTGATAT GCTGAAGAAT GGAGCTCATT GGTTTGAGGC      240
TTCTGCCAG      249

```

(2) INFORMATION FOR SEQ ID NO:850:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 417 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:850:

```

GAATTCGGCC TTCATGGCCT AGACATGAAT TCTTTGACTT GTGCTCATTG TTTCTGAACT    60
TATTGAGGCT TATATATATC AAATAAGGTT AATTTACACA ATAATTATTT TTAATAATTA    120
ATAAACTCAT TCATGTAGTA TATTTTAAAA CATTATTTCG TCTCATTTT CCTTCTCTTT    180
TTTCTTCCTA TATATTTTAA AGGTTTCAAG AGAAAACGGG CTTCAGTTTT TAAAAAATG    240
TAGACTTGCA TTTTACTGT GCTTATTTAA AATAATGGAT ATAATTTATA TTAAGGTCCA    300
AATTATTTTA TTCACAGGAT AATCATGGTC TCTGATAAAA GATGCCACCA TTTCTGTGTA    360
CTCACAGTTG TTGTATATTT TCAATTTC AATTTGAAAG TAAACTCAAC ACTCGAG    417

```

(2) INFORMATION FOR SEQ ID NO:851:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:851:

```

GAATTCGGCC TTCATGGCCT AGCTAGCTAT TGTAATACAA AATAATAAAG TCTGCATTTC    60
CTGTCTTCTT TAAGCCTTCA TTGCCTATTA AATCATTACA TTTTAGATTA GATATTATAT    120
TTTGATCATT TGAGGAACCA AATTAAAAAT ATGGAATAAG TATGGCATTG AATTATACAT    180
GCCTATTGCT AATATATTCA TATTTTATAG GATTTAATGA AACAGTCTCC CAGCTCGAG    239

```

(2) INFORMATION FOR SEQ ID NO:852:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 489 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:852:

```

GAATTCGGCC TTCCCTAGGA AAGTTCTTCA CATCAGGAAA CATTAGATCA TATACAGAAA    60
CAAACTAAAT TTGATAAAGT AGTTATGGAG TTTTTCATG AGTGATGGT GAATAAATTC    120
AAGAAAACAT CTATTCGTAA GCAACAGACA AATAATCAAA CAGAAGTAGT TAAAAAATTT    180
GAAAAAGATG TTATGGAAGG TGTTACTGTA GATGATCACA TGATGAAGGT AGAGACAGTT    240
CATTGCAGCG CTTGCAGTGT GTATATCCCT GCTTTACATA GTTCAGTTCA GCAGCACTTA    300
AAATCTCCTG ATCATATCAA AGGGAAGCAG GCTTATAAGG AACAAATAAA AAGAGAGAGT    360
GTCTTGACTG CTACAAGCAT TTAAATAAT CCAATAGTGA AGGCGCGATA TGAACGTTTT    420
GTTAAGGGTG AGAATCCTTT TGAAATTCAA GACCATTCCT AGGATCAGCA AATAAAAGGC    480
AGACTCGAG                                     489

```

(2) INFORMATION FOR SEQ ID NO:853:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:853:

```

GAATTCGGCC TTCATGGCCT ACTTCACTAA CCTTTTTTGT TTAAAAATGA ACCTGCTACT    60
TAAAAAAAT ACACATCACA CCCATTTAAA AGTGATCTTG AGAACCTTTT CAAACCAGAT    120
GGAGCATTGC TTGCAAATTT TTTTCTCTA TGTTCATGCGTCTGCGTGTG TGTGTGTCCA    180
GGCAAGAACA CATTTTATAA AAATAAGAAC ACTTGGGCTG GGCATGGTGG CTCATGCCTG    240
TGATCGCAGC TCTCTCGAG                                         259

```

(2) INFORMATION FOR SEQ ID NO:854:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 217 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:854:

```

GAATTCGGCC TTCATGGCCT ACACAGCTGC AGTCAACATC CACAACCTACC GGGACCACAG    60
CCCCTACTGC TGGCTGGTGT GGCCTCCAG CCTTGGCGCC TTCTACATCC CTGTGGCTTT    120
GATTCTGCTC ATCACCCTGA TCTATTCCT GTCCCGGGC TACGCTTACG GGGTCCCTCTG    180
GCACAGAACC CCAAGCGGG CAACAGCAGG GCTCGAG                                         217

```

(2) INFORMATION FOR SEQ ID NO:855:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 246 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:855:

```

GAATTCGGCC TTCATGGCCT AGACCTGCCT CGAAAATAAA TAAATAACCC ACAGAGCTGA    60
GCACAGGCTT CTTATGCTT TTCCTTGGGA AGGTGTCCTA GATATATGAT GATTCTTTT    120
TTCTTTCACC TCCTCTTGAT TGTCACAAGT AGCTTGCTTG GCTCAGGAAC AACAGAAGAG    180
AATAAGAAA ATGACCTCAG ACCTTCCTTA CCTCAGTCTT ATGCACGAC CGCAGCCAGA    240
CTCGAG                                         246

```

(2) INFORMATION FOR SEQ ID NO:856:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 334 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:856:

```

GAATTCGGCC TTCATGGCCT ACTGTCTCAA AAAACAAACA AACAAAAAGA AAGAAAGAAA    60
AAGGAAAGGT AGACTTATAT AAAATAGACA GTAAAGCATA GGGCAGCAGA AAGGAAAACC    120
TACTCCGCAA AAGTCACTTG TTTTAACTC ATCCAGGAGC TTCTCTAAG TTCACCTTTA    180
TTTTTCACAC GTCCTGGGTC CAAATCCAC CATGCTCTGC CGTATTCTTG CCCTTTGCTC    240
TGTTGTGAA AGAGTCATGA GCGAGGCCTC TCTATGGATG GTTCCAATGA GCCACATGAA    300
CAAAGCCATC GTCAGTAAGC AGCCACTTCT CGAG                                         334

```

(2) INFORMATION FOR SEQ ID NO:857:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 129 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:857:

```
GAATCCACT TGATCAACTT AATTCCTTTT CTTATCTTC CCTCCCTCAC TTCCCTTTTC      60
TCCACCCCTC TTTTCCAAGC TGTTTCGCTT TGCAATATAT TACTGGTAAT GAGTTGCAGG      120
ATCCTCGAG                                     129
```

(2) INFORMATION FOR SEQ ID NO:858:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 260 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:858:

```
GAATTCAAGC ACCATAATTT GGCCACTCAG CTGTCATCAG GAACTAAGCC AACATTCCTT      60
TTCAGAAAAA GACTTTGGAG AGGGGCAAAC ACTTCTGACA GTCATACTGT GTACTTATTT      120
TAGAAAAATA GCTGCTCTCA GGCTTCAGTA TCCAGTCAAA TATAATATAG AACTCTAGTC      180
TGTTTGGAGT CCTACTACAA TAATATTTTC ACAATAGACT ACCAGTTATG AAGTTCTCAC      240
ATTTTCCCG CATGCTCGAG                                     260
```

(2) INFORMATION FOR SEQ ID NO:859:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 217 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:859:

```
GAATTCCTGT CCCACCTGCT GAATGAGTGC GTGCCAGCTG AACATCAGCG TGGCTTCGTT      60
CTTCAACACA TTTACAAAAG AAGTAAAAAT AAACAGTTTT TTCTTCTCAA TTCTCCTCCC      120
TGCTTTTTTC CTTTGGAACC ACAATCATGC CCCAGTAAGT GCTTTCCTAG GTGAGAGGTG      180
TGTGTCCCAG GTTGAAGGCA AGGCCAGTGG TCTCGAG                                     217
```

(2) INFORMATION FOR SEQ ID NO:860:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 107 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:860:

```
GAATTCGGCC TTCATGGCCT AGAATATTTT TATCATCCCA AAGCTAAAC ATTAAAAAT      60
TTAAAGTTTA TTCTTAGAGA TTGATGCAAC TGCATATCT AATCGAG      107
```

(2) INFORMATION FOR SEQ ID NO:861:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:861:

```
GAATTCTAGA CTGCCTCGA GGGCATCCTT TACTTTTTTT TTTAATTCAG CACAAACCAA      60
ACAAAATTTT AAAATTGAT GAGATTGAA GTTGACAAA AGTGTATGC AGTTTAAAA      120
ATTTTTTTTT TTTTTTTGA GACCAGATCT CACTCTGTTG CCCAGGCTAG AGTGCAGTGG      180
CATGATCTCA GCCCAAACCT CTACCTCTTA GGCTCAAGCG ATCCTCCCAT TTCAGCCTCC      240
CAGGTAGCTG GGAGGCTGAA ATGGGAGGAT CAACTCGAG      279
```

(2) INFORMATION FOR SEQ ID NO:862:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:862:

```
TGTATTTTTA CGTGACCTGT TTCCAGAAT TTATGATAT TCTATGGTTG GTATTCTCAA      60
TTTGCAAAT GTGCTTGGT GTGGAACCTT TTCATTGTTT TTGCTGGGGA ATTGAIGGAT      120
CCTTTGCATC AAGATGCTTA TATTTATTCT TCAGTTCTGG GAAACTTCCC TGTATTATTT      180
GTTTGATAAT TGCTTTCTCT CTGCTTTCTC TTTCCGTTT TTTGGAATTG CTGTTTGTG      240
TGTTGCATTA CTGCAGAGAA CTCGAG      266
```

(2) INFORMATION FOR SEQ ID NO:863:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:863:

```
GAATTCGGCC TTCATGGCCT AGTGCTGTGG TAGTTTGTGC CTTAGAGGG ATTTGTGTAT      60
CTCATATAAT TTAATTTTTT GACATTCAC TTTTACAAT ATTCTGTTAG AATTCCTTTA      120
ATTTCTGTAA GGTGATATCT ATACTTTCAT TTATGTCTAG TAACCTGAAT CTCTCTCTT      180
```

TTGTTCTTTC TCGGTCAAAC TAATAATACG TCAATTTTAC TGATATATCA GAAGAACCAC 240
 CTTTCAAGTT TATTAATTTT CTCTATTGTT TTTATTTTCA CTACTTATCT CCATGCTAAT 300
 CTTTATTATT TCTTCCTTCT GTTACTTTG GGTAACTCT GCTCTTTCAC TCGAG 355

(2) INFORMATION FOR SEQ ID NO:864:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 205 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:864:

GAATTCGGCC TTCATGGCCT AGCTTACTTT ACAATTCTGC TGTGTGTCAG GTGTTCTCTAT 60
 AGTTTTTTTT AAAGGTATGT TAACTATTTT TCCCTTTTGG TTTATATTTG TAGGAATCTT 120
 TGCCTTTAAG TGTGCCCCGTG CAGAAGAATT ATTAAACATG TTGCAAGAGA TTATGCAAAA 180
 TAATAGTATA AATGTGGAGC TCGAG 205

(2) INFORMATION FOR SEQ ID NO:865:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 368 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:865:

GAATTCGGCC TTCATGGCCT AGTCACTTGT TCTGTAGAAT ATGTTCAAAT CTGATTTTGT 60
 CTTTTTGTTC TCTGTGTGTA TTACCTTGTT CCTCTATCCC CTGTTTTTTC TGAAAATGAA 120
 AGTTAGCTTA GAAGTTTCAT TCCATTCTGG TTCAAAATGC TTAAGTGCTT TATGTCGTGT 180
 CATATTAGGA AACACAGTAT CTAGTGGTCC CAATTTTAGT GATTCAAAAA TCAGTCTCTA 240
 GGTTCAGAGA TTAATCAGTA GATTCAGAGA TCTCTCCATT GTAAATTTCT TAATTAACCT 300
 TTGAATTGCT AATGTTCTGT TCACTGATCG TTGTGGCCCA AATTATTAT TTCACTAGGG 360
 GACTCGAG 368

(2) INFORMATION FOR SEQ ID NO:866:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 144 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:866:

GAATTCGGCC TTCATGGCCT AAGGAGCAGC AGGAACATGG TACATAAAAT CATCCTGCTT 60
 CTTATAATGG CAGGAATCAG TGGGATATGG TATTGTGCA GCATGCTGGG GCATCCACTA 120
 GAAAGGCCTG AAGGAAGACT CGAG 144

(2) INFORMATION FOR SEQ ID NO:867:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:867:

```

GAATTCGGCC TTCATGCGAT TGAATTCTAG ACCTGCCTTG AGCCCTCCA CCCCCAAATC      60
CTTCCTCTCC TCCAGTCCC ACCCTTGCC CCACGGAGTC CTGGGACGC AGTCCCCCAG      120
CTGGGAAGAG GGGGGATCG GGCAGTGGT CCTCCTGTC CCGCTTCT TGGGGCTTG      180
CTACTTTTG TCTTCTATTG TGTGGCTTC TGAGTATTG AACCCAGTC CTGTGTCACC      240
TTCCTTTTC CTTCGCTGTC CCCTCGAG      268

```

(2) INFORMATION FOR SEQ ID NO:868:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 384 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:868:

```

GAATTCGGCC TTCATGGCCT ACAGAACTAT AATTTATCTT AGTTAAGCC ACTGGTAAGT      60
GTAATTGTAA TTGTAATTG TTACATCTGC TATAGTGAAA CTAATACTGA AATTTAGAAA      120
AGATGGGTAA CTTATTATGT GGTGAAGTTT AAAAAAGATA AGTAACTCGT TGAAGATCAC      180
ATAATTAGAA AAGAAAGCAG TAGAGCTTGG CCTTGAATC AACCAGTGTG ACTCCAGAGC      240
TTGTAGAACA GAATAACCAC CTCCAAGGCC AGCTGAATCT GACCACAGTC TGGTGGGAAT      300
CTAGTACATC TCGTTGAGAA GTGGGATTGC CGGAGGGGAG TTGTTATTG ATGAAGGTGA      360
TGATGTTGT CCAATGTCTT CGAG      384

```

(2) INFORMATION FOR SEQ ID NO:869:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:869:

```

GAATTCGGCC TCATGGCCTA CTGGAGAGT TTTGTAAGGA GAGTGGCAAA CATAGCACGG      60
ACTAATGCCA CGAACAACAT GAATCTAAGC CGAAGCAGCA GTGATAACAA CACTAATACT      120
TTGGGGAGGA ATGTGATGAG CACAGCAACT TCTCCTCTTA TGGGTGCTCA GAGTTTCCCT      180
AATTGACCA CACCTGGTAC TACATCAACA GTGACTATGT CAACATCCAG TGTACTAGC      240
AGCAGCAATG TAGCTACAGC AACAACTC GAG      273

```

(2) INFORMATION FOR SEQ ID NO:870:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:870:

GAATTCGGCC TTCATGGCCT AGGTCAGGAG CCTTCTTGA GTCCCAATTC TGCATCCCCA	60
AATGATAAAG ATGGGGTGAA GGAAGTGA GGCATGAGTT GGAGAGTCTT CTTGCTTGAG	120
GTCCCTGAGA ATGTGGTCCC GGAGTATCCG GATCACTGGA AGCCAGGACT TCAACGCATT	180
GGGTAGTGAG GGATGGAGGG AGGGGCTGGA CGCAGAAGCA GGATGAAGTC TGCTGGGTGT	240
GAGCCTCAA GGAGGTAGAA CAAAGAGGGC AACTCGAG	278

(2) INFORMATION FOR SEQ ID NO:871:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 270 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:871:

GAATTCGGCC TTCATGGCCT ACCAGACTCC CATAATAATA AACCTGGTA ATAAACAAAG	60
GAACTCCTTC CAGTTTCAGT GTATCAACCA CCACGTACCA GATAAAATCT TATTCACCT	120
TTCACAATTT ACCAGTGTG GGCTGTGAAT TAATATTTT ATTTTCTGT GCATTCATAA	180
ATTAAGATTA TTTTATTGTA TTGTAAGTGT AATTTTGAGA CTAAGTCTA AAAACAAGAC	240
ATCATGAAAT GGAGCTGGAG GATACTCGAG	270

(2) INFORMATION FOR SEQ ID NO:872:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 339 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:872:

GGTTTAGAAA GGGCACAAC AGTGCAAACC TGTTTCATGAA CCTTTACATG TCATGAACAG	60
GGCAGAATGC TTCAGGAAAG AATTGTCGAA AGTAAAAAAG CAAATAATGG ATGCAGCTTA	120
TTCTAGTTAT TGAAGAATCC AACGGGATGG AAGCTAAATG TAGCACATGG CATGGGCGAT	180
GTCTCAACAG TGAGTGGGAT AACAGTCTGT TTTAATGGTT CAGGGCCAAT AACCGGGGAG	240
GGTGAGGAAC GGCATCTCTG TTTTGAGTAA ACAAGAGTGA TTTCCTTCCC TGACACTGAA	300
AAATGAAACC TTGGGGAGA TAGAGGAAGC GATCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:873:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 245 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:873:

GAATTCGGCC TTCA?GGCCT AACCTTTAAA CCCTAAAATC CAGGAAAAGA AAATAAATAC	60
ATTATCATGG ACCTGAGGGA TTTTACCTG TTGGCTGCTC TGATTGCCTG TTTAAGGCTG	120
GATTCCGCAA TAGCTCAAGA ACTTATTAC ACTATTAGAG AGGAATTGCC TGAAAATGTG	180
CCCATAGGAA ACATACCAA GGATCTGAAC ATTCTCACA TCAATGCTGC CACAGGGCCA	240
CCTCG	245

(2) INFORMATION FOR SEQ ID NO:874:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:874:

GAATTCGGCC TTCATGGCCT AGTTTTCTTC ACTGGCATT CACAAATTTAA GCCATTGCTG	60
CCTCATTAGC CTGTATTTT GTGTGCATAT CATATATCCA GACCTGTATG TTCACTTTAA	120
GCATTCTTAT ATCACACTGT CTCCTCATCT ACCATATGGT AAATGTTAAA ACTCCACATT	180
TGTCTGCATC AGGGAAAATG CATGGGCACA CATCCTCCCC CCCTTCCCTC GAG	233

(2) INFORMATION FOR SEQ ID NO:875:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:875:

GGACAGGAAG TCAACTTCAA GCAGATTGAC TTGAAACGGG ATCTCATTTA GGAAGCATAA	60
GTGTCCAATC AAAAAGTGTG TATTTTTTTA AATTGGGAAA ATACTCAAGT TCCAGTTGCT	120
TATCATTCTC CTTCACTTTC TGAAAACCTG GCAATCCCAT GTGGACTTCT GGTAGAATGA	180
GCAATGCAAA GAACTGGCTT GGAATTGGCA TGTCTTGTGA CTTCTGGGGG CTGATGGACC	240
TTACGACCAC CGTTCTCTCG GACACCCAC ACCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:876:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 290 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:876:

GAATTCGGCC TTCATGGCCT AGTCCTCAA TTAGTTATTG CATTATTTTC AAGTATTGTA	60
TTATCATTTA TTGATATGG TAGTGTTC TAAAACAGGA AATACATAAT TTGGCATCCT	120
TATTCTTAGT TTTATACCTA AAGAACCTAG TAACTCACAG GAGAACGTAG TAACATTATC	180

ACTTGTTAAT CAAGCTTTCA GTGAAACAGT TTATCAAACC ATTTTTTTTA TTTTGATTCA 240
GCAAATTTGT CAACTAAATT TAATTTAAAA GTAGAGGTCC AAAGCTCGAG 290

(2) INFORMATION FOR SEQ ID NO:877:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 260 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:877:

GAATTCGGCC TTCATGGCCT ACTCAAATTG GAAAGAAAGA TTCCTTGAGA CTTACTTTTA 60
AAATCTAAG TGTGAGGNNACANAGAGT AAAGNCCAGA CTCATTNNAC CTTGATGTC 120
TGCATAGATC CAGNAGTTGT ACATTTTACC TAACAACATC ACTTTTGTG AACATTCCAA 180
CTCCAGAAATG ATCCCAATC ACCCTAATCT CAGAAATGCTG GAATGATGTC TGTGGCAAA 240
CCCAGGACTC CACACTCGAG 260

(2) INFORMATION FOR SEQ ID NO:878:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:878:

GAAGCGACCA TTCGTCCAAC AGGTATGGCT GGTTTTGTG CAATGAGAGA ATGTCCACTC 60
GCAATGATGA GCCTGAGAAG GCAAGTCGTC CGTTTGATGT GGATCGCGAT GGTTTGTGTA 120
TGGGTGAAGG TGCCGGGATT CTTATTCTGG AATCACTCGA ACATGCTGAG AAACGTGGAG 180

(2) INFORMATION FOR SEQ ID NO:879:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 497 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:879:

GAATTCGGCC AAAGAGGACT ACACAGAGCC CCTGTTTGGG AATTTGAGAT TCTGTGTCAT 60
GCTGGTTTTC CTTTCAGAAAT TGCTTGAAAT CGAGTTCTCT TAGCCACTGG ACACCTAGTT 120
TTCAGGAGAA TGTCCCAAGA TTGTTTATAT ATACAAAATG GCAAAAGTAC TGTTTTTCGA 180
ATTGATAATT CAAGCAAAGG CTTCTCTTTA CTGTCACTGA TTTTTTTTGT TTTTATTTT 240
GTTTCCTTGT TTCTATTTC TGAAGCTTT GAAGGGAGGA GAAGCAGAAA ATTTTGTGTA 300
TGTTTGTTAA AAATCAGAAC TACTTAATGC TTTTGGCCAC AGCATATTTT CTGCTGTT 360
GGAGCCGTTA GGAAGATTAC CTATGTCCTA ATCTTCAACC TGAGAAGATT TTTGACTCTT 420
GTGTCTACTG TTGATTGTTT GCTTGAGTTC TCAAAGACCT GTGGCCAGGT ATTTTAAAAA 480
GTCGTCTATT TCTCGAG 497

(2) INFORMATION FOR SEQ ID NO:880:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:880:

```

GAATTCGGCC AAAGAGGCCT AGCAAAATCA AATTCAACCC ATGAGTCACA GTGCTTCTT      60
CAACAAGAAA ACATTGAACA CAGAAAGCAA TTGTGAATAT AAGGACCCTG GGAAAATGAT      120
TCGCACGAGG CCCACCTTG CTTCTTCACA GAAACAACCT CAGAAATGTT GCTTATTTAC      180
AGAAAGTTTG AAGCTGAACC TAGAAGTGAA CCGTCAGAAT GAAAGCAATG ACACAGAACA      240
GCTTGATGAC GTTGTGGGT CTGGTCAGCT ATTCAGCCAT AGCTCTTCTG ATGCTCTGCAG      300
CAAGAATATT CATAAGGAG AG                                     322

```

(2) INFORMATION FOR SEQ ID NO:881:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:881:

```

GGCCCACCTG TGTCTGGTT GAGGGTCTCC AGGGTTCTTT GGGGCCCGAG GCCAATGGTG      60
GCAGAGTCTA CATAGAACTA TGCTTCGTGG TGTTCTGGGG AAAACCTTTC GACTTGTGTG      120
CTATACTATT CAATATGGCT GTATAGCTCA TTGTGCTTTT GAATACGTTG GTGGTGTGTG      180
CATGTGTTCT GGACCATCAA TGGAGCCTAC AATTCAAAAT TCAGATATTG TCTTTCAGAG      240
AAATCTTAGT CGACATTTTT ATGGTATCCA AAGAGGTGAC ATTGTGATTG CAAAAGCCCC      300
AAGTGATCCA AAATCAAATA TTTGTAAAAG AGTAATTGGT TTGGAAGGAG ACAAATCCT      360
CACCCTAGT CCATCAGATT TCTTTAAAAG CCATAGTTAT GTGCCAATGG GTCATGTTTG      420
GTTAGAAGGT GACAATCTAC AGAATTCTAC AGATTCCAGG TGCTAGGCCT CTTTGGCCGA      480
A                                     481

```

(2) INFORMATION FOR SEQ ID NO:882:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:882:

```

GAATTCGGCC AAAGAGGCCT AGGGAAGAGT GGAACAAAAG TCAGTCGTAC ATTCAGCTAC      60
ATCAAGAATA AAATGTCTAG CAGCAAGAAG AGCAAAGAAA AGGAAAAAGA AAAAGATAAG      120
ATTAAGGAGA AGGAGAAAGA TTCTAAAGAC AAGGAGAAAG ATAAGAAGAC TGTCACCGG      180
CACACTTTCA GTTCATTCC TGTGTGGGT CCCATCAGCT GTAGCCAGTG TATGAAGCCC      240
TTCACCAACA AAGATGCCTA TACTTGTGCA AATTGCAGTG CTTTGTCCA CAAAGGCTGC      300
CGAGAAAGTC TAGCCTCCTG TGCAAAGGTC AAAATGAAGC AGCCCAAAGG GAGCCTTCA      360

```

GCACATGACA CATCATCACT GCCCAGC

387

(2) INFORMATION FOR SEQ ID NO:883:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:883:

```

GAATTCGGCC AAAGAGGCCT AACGCAGCCA TGGCTCGTGG TCCCAAGAAG CATCTGAAGC      60
GGGTGGCAGC TCCAAAGCAT TGGATGCTGG ATAAATTGAC CGGTGTGTTT GCTCTCGTC      120
CATCCACCGG TCCCCACAAG TTGAGAGAGT GTCTCCCCCT CATCATTTTC CTGAGGAACA      180
GACTTAAGTA TGCCCTGACA GGAGATGAAG TAAAGAAGAT TTGCATGCAG CGGTTTCATTA      240
AAATCGATGG CAAGGTCCGA ACTGATATAA CCTACCCCTGC TGGATTCATG GATGTCATCA      300
GCATTGACAA GACGGGAGAG AATTTCCGTC TGATCTATGA CACCAAGGGT CGCTTTGCTG      360
TACATCGTAT TACACCTGAG GCGGGCATAA CACAGCAAGA CGAGAAGACC CTATGGAGCT      420
TTAATTTATT AATGCAAACA GTA                                         443

```

(2) INFORMATION FOR SEQ ID NO:884:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:884:

```

GAATTCGGCC AAAGAGGCCT AAACATCATT TGTACTCTAA TCCAATCAAA GAAGAAATGA      60
CTGAGTCTAA GTTCTCTAAG TACTCTGAAA TGAGTGAGGA AAAACGAGCC AAACCTCGTG      120
AAATTGAGCT CAAAGTTATG AAGTTTCAGG ATGAATTGGA ATCTGGGAAA AGACCTAAAA      180
AACCAGGCCA GAGTTTTTCAG GAGCAAGTAG AACACTACAG AGATAAACTT CTTCAACGAG      240
AGAAAGAGAA AGAGTTAGAA AGAGAACGAG AAAGAGACAA GAAAGATAAA GAAAAATTGG      300
AATCTCGCTC CAAAGACAAG AAGGAAAAAG ATGAGTGTAC TCCGACAAGG AAG          353

```

(2) INFORMATION FOR SEQ ID NO:885:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 475 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:885:

```

GAATTCGGCC AAAGAGGCCT ACAATTTTTT GCCTTTTAC CTTCTGTCC TTTAATGCCA      60
TCTCTTTCTC AATTATTTTC TCTCATTTT TTTCTGAGCA GACTTATACA AAAAGGAACA      120
TAAATTAAAT TTGCCAAATA TCAAAGAGA GGAACTTTTT ATTTTATTATT TTTTGGAAAC      180
GGAGTCTCAA TCTGTCTCCC AGGCTGGAGT GCAGTGACGC AATCTCAGCT CACTGCAACC      240
TCCGCCTCCC AGTTCAAGAG ATTCTCTGCC TCAGCCTCCC GAGTAGCTGG GATTACAGGT      300

```

ACCCTCTACC ATACTCAGCT AATTTTGTGA TTTTGTAGTAG AGACTGGTTC ACCATGTGGG 360
 CCAGGCTGGT CTCGAAGTCC TGAAGTTCAGG TGTTCGCTCT GCTTTGGCCT TCCAAAGTGC 420
 TGGGATTATA GCGGTGAGCC ACCACTCTCC ACTGAACTTT TTAATCTTAG AGCAG 475

(2) INFORMATION FOR SEQ ID NO:886:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:886:

GAATTCGGCC AAAGAGGCCT AGGGGTGTTA ATTAGCTCAG CTGTAGCAAT CATTTCATAA 60
 TGTATATCAA AACATCCCAC TGTATACCTT ATACTTTTTT ATAAAAATAA ATATTCTTAC 120
 AAAAGGACAG GCGCTGTGTC TGTCTGGCTC ACCATTGTAC CCAATACCCA ACAGGGTGCC 180
 AAGTACCCAA TACCCAACAG GGTGCCAAGG AACACAAAAG GCACTCAAAA TATGTTTGTT 240
 GATTGGAGTT TACAAGGAAG AAAGGTATTT TCTTATCCCT CTCTTCCCTT CCCACCCAAA 300
 CATAGCTTCT TCTAAGAAAA GAACTGAGG CTGGGCAAGG TTAAGGCTA GCTCCTGGTA 360
 CTTTTCATC CACACTCAGT TTACCTGTGC CTTAAACCAG ACTTCATCAA ACTTCAGTCT 420
 TCACAAGTCA CTTCAACATT TTTGCTCTAC CTACTTACTG CCTGTGTAGG CCTCTTTGGC 480
 CGAG 484

(2) INFORMATION FOR SEQ ID NO:887:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 184 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:887:

GAATTCGGCC AAAGAGGCCT AGTGGGACAT AAGGCTGGAA GGTAGCACAC ACAGCACCAT 60
 ATTCTTTTTT ACTTGCATGC GAGTACTTTT GAGTGCTTTT CTCTTTACCA AATATATGAG 120
 TTCTATTACT ACATTCCCTT TCTTTGTTTG TTTTAGTGAG ACAGGGTCTC GTTCTGCCTC 180
 CCAG 184

(2) INFORMATION FOR SEQ ID NO:888:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 78 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:888:

GAATTCGCCC AAAGAGGCCT AGTTTTCGAC TTACTTTTAA TTTCAAATCA GCTGCAGATG 60
 TTTGGGAGCC TTCTCGAG 78

(2) INFORMATION FOR SEQ ID NO:889:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 546 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:889:

```

GAATTCGGCC AAAGAGGCCT AATGGAAGAT ATGCTGAAAG ACTTCTCCT TGGAGAACAC      60
TTATTATTGG TTGGCAACCA GGGTGTAGGA AAAACAAGA TTGTGACAC ATTCCTTCAC      120
CTGCTCAACA GACCCGAGA ATATATTGAG CTACACAGGG ATACCACAGT ACAAACCTCTT      180
ACGCTTCAGC CTTGGTTTAA AGACGGACTT ATTGTATATG AAGACTCACC TTTGGTTAAA      240
GCAGTAAAGT TGGGTCATAT TCTGGTAGTA GATGAGGCTG ACAAAGCTCC AACAAATGTC      300
ACGTGTATTT TAAAACTCT AGTAGAAAT GGAGAAATGA TTCTAGCAGA TGGAGACGC      360
ATTGTTGCAA ATTCTGCTAA TGTGAATGGA AGAGAAAATG TTGTAGTGAT TCATCCTGAT      420
TTTAGGATGA TTGTTCTGGC AAATAGACCT GGATTTCCTT TCCTAGGCAA TGATTTCTTC      480
GGTACCTTAG GTGATATTTT TAGCTGCCAT GCAGTTGATA ACCCCAAACC CCACTCGGAG      540
CTCGAG                                         546

```

(2) INFORMATION FOR SEQ ID NO:890:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:890:

```

GAATTCGGCC AAAGGGCCTA GAGATTTCAT GTATTCTCT TCACTTCCAA GAGAGTGGAT      60
AGAATGGAGA AATCTAGATT GATCTTTACA GCTCCAGATA AAGGGACTAA AAATATTGGT      120
TTAAAATATT AAAGGTTAAA GAAAGAGACT GTTGGTTTCT TTCAAAGTGA TTAAATTTA      180
AACTAGGTTT TTATTACTAA GTTTTGAAA TGGGGTAACC ATTTTCTCT CATATCAAGG      240
ATATGTACAT ATTTCCATT TCCCCATAAT TAAAAACAAA CAACTCCCAT CCACTTCTTA      300
TAAATAGTTC TTAAGTTGGG CTTAGTAACA ATGTATATTG TGCCAGTAAT ACAGAAAAGG      360
TGGGAGTATA AAGACCATCC TGTCTGTGA GAATCCTATA GAACCAAGGT GCTGGATTAT      420
GGTGGTT                                         427

```

(2) INFORMATION FOR SEQ ID NO:891:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:891:

```

GAATTCGGCC AAAGAGGCCT AATTTTATTG AACTGCTTA TGTATGTCAA AGGAGCCCAC      60
AACTTCAGCT ACACAACCTT TTGTATTGAA AGAACTCATA CTTTGTGTAG CTTTATTTC      120
ACATTTAATT TAAAGTGACT TTTAGCACTA AAATGCCTAG AAGATTTTAC TCCAGACCTA      180
TAAGGAAATG TTTAGTTTTT ATGAAAAATG ACAAGTCGAT GGTTAACTT CTCATGTCTT      240
TGGTGCTTTG GCCCTAATAG CACTGGACAA CACCACGACC ACATGGAAAC ATATTTTTTG      300

```


AAGCAAACT TTAATTTTAT ATAACGTATG CTATGGAGAA CTCGAG

346

(2) INFORMATION FOR SEQ ID NO:892:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 95 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:892:

GAATTCGGCC AAAGAGGCCT AGTGGAGAGT GAAGCTTAAG ACTGCAATTG CAGAAAAAGT 60
 CCATGAGGAG AGAAGAAGGA GAAAGGGGG AAGAG 95

(2) INFORMATION FOR SEQ ID NO:893:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:893:

TTTTTTTTTT TTTTTTTTAA ATACTTCGCA TACTCTCCAA TGCCCAAAAA TAGCAAGGTG 60
 GTAAAAAGAG AATTAGATGA TGATGTTACT GAGTCTGTCA AAGACCTTCT TTCCCAATGA 120
 AGACGCAGCT GATGATGCTT TTAAGACAAG TGAACATAATT GTTGATGGCC AGGAAGAGAA 180
 AGATACAGAT GTTGAAGAAG GATCTGAAGT CGAAGATGAA AGACCAGCTT GGAACAGTAA 240
 ACTACAATAC ATCCTGGCCC AAGTTGGATT TTCTGTAGGT TTAGGAAATG TGTGGCGATT 300
 TCCATACCTA TGTCAAGAAG ATGGGGGCGG TGCATATCTT TTACCATATT TAATACTACT 360
 TATGGTAATA GGTATTCCCC TTTTTTCTT GGAACCTCTCT GTGGGTCAAA GAACCACTCT 420
 CGAG 424

(2) INFORMATION FOR SEQ ID NO:894:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:894:

GCCAAATCA AGCAAGTAT GAAGAAAGAT AAAGAAGGGG AAGAAAAAGG GAAGCGAAGA 60
 GGATTCCTCA GCATCCTGGG ACCCCACGG AGACCAAGCC GTCATGACAA CAGTGCAATT 120
 GGCAGAGCCA TGGAACTACA GAAGGCGCGC CACCCTAAGC ACTTATCCAC ACCCTCATCT 180
 GTGAGTCTTG AACCTCAGGA CTCTGCCAAG TTGCGCCAGA GTGGGTTAGC AAATGAAGGA 240
 ACAGACGCTG GATACCTGCC TGCCAATTCC ATGTCTTCTG TAGCTTCAGG GGCCTCTTTT 300
 TCCCAGGAAG GAGGGAAAGA GAATGATACA GGATCAAAGC AAGTTGGAGA AACATCAGCA 360
 CCTGGAGACA CCTTAGATGT CACCCTCGAG 390

(2) INFORMATION FOR SEQ ID NO:895:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 595 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:895:

```

GAATTCGGCC TTCATGGCCT AGTAGCTGGT ATTTATTCCC CAAAGTAATA ATGTTGAAGT      60
ATGGGTCTCA TCATTCCCAT ACACAGAAAC ACAAACACT TTGATCATAA ACTTTTTTCT      120
TCAGAAGCCA AACTAAGTTG CAGAATAATA GAGCCACTGG TTTAATGTTT CCTCAAGATA      180
GGTTTTAGTG TAAGCTAGTA TTCTGTGTGT TCGTAGAAAT GATTCAATAC CTGCAGCTGG      240
TGAATTAGGA ATTGTATTG TTGCCTTTTT TATATTAGAT GAGGTGCAAA AATTTTAATG      300
CTAGTCAGTA TGCACCACCA CAGGAAAGTT AGATCCCATT AGCACTTGAA ACTACAGCTT      360
TGGAAACTTA GGCTAAGTTA ATTTGGATTG GTTACTTGAT TCACCTACTG ACCTTTTCTT      420
TTGTTTGAAG TGCTTATCAG CATAATGAGC TAAGTGTCAT GCATATTTGT GAAGAAACAC      480
CCTTTTGGT CCCTTTGGG ACAGAGAGGT ACTCCTTGAT CTTTATGAAT GACAGGTTAC      540
TGTTTGCCT TATTGCTTAA CTTAATGTAG TGAAATAAAG CAGACGAGGC TCGAG          595

```

(2) INFORMATION FOR SEQ ID NO:896:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:896:

```

GGCTGATCCG CGTGAACATG GAGGACTTGC GAGAGCAGAC TCACACCCGC CACTATGAAT      60
TGTACCGACG CTGTAAGCTT GAAGAGATGG GGTCAAGGA CACTGACCCT GACAGCAAAC      120
CCTTCAGTCT TCAGGAGACA TATGAAGCAA AAAGGAATGA ATTCTGGGA GAACTGCAGA      180
AGAAAGAAGA AGAAATGAGA CAAATGTTG TTATGAGAGT GAAGGAGAAA GAAGCTGAAC      240
TTAAGGAGGC AGAGAAAGAG CTTACGAGA AGTTTGACCT TCTAAAGCGG ACACACCAAG      300
AAGAAAGAA GAAAGTGGA GACAAGGAGA AGGAGCTCGA G          341

```

(2) INFORMATION FOR SEQ ID NO:897:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:897:

```

GAATTCGGCC TTCATGGCCT ATGCCTTAAT TTGCTGTTT GCCCTCGGAT CTCTGGGTTT      60
GATTTTTCGCT TTGACTTTAA ACAGACATAA GTATCCCCTT AACCTGTACC TACTTTTGG      120
ATTACGCTG TTGGAAGCTC TGAAGTGGC AGTTGTTGTT ACTTTCTATG ATGTATATAT      180
TATTCTGCAA GCTTTCATAC TGACTACTAC AGTATTTTTT GGTTTGACTG TGTATACTCT      240
ACAATCTAAG AAGGATTTCA GCAAATTTGG AGCAGGGCTG TTGCTCTTTT TGTGGATATT      300
GTGCCTGTCA GGATTCTTGA AGTTTTTTT TTATAGTGAG ATAATGGAGT TGGTCTTAGC      360
CGCTGCAGGA GCGCACTCG AG          382

```

(2) INFORMATION FOR SEQ ID NO:898:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 422 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:898:

```
GAATTCGGCC TTCATGGCCT ACGAGCCTCA CATCACTTGT ACAAGCCACC TGGGAGAAGT      60
GGCCCTCAGG AAGATCCTAA AACCAATACA CAAATACAAC TTTTTCATT CATTAAATACA      120
TCAAGTTCAT ATAAGAGTCA AACAGGTAAA AGCAGCATCC CAAACTGTTT TCTCCTCGTA      180
CATGTCAGTT CCACGATCCT CAGTCTCATA AAGTCAGGGA CTAGAGACCA ATGTAATTAT      240
CAATACGTAC CTGCCCTTGA GTGAACCTTC AATGCCAACT AGGAAGGGCG CTTCACAAAAC      300
GACGTTATTT GTAACCTCCTA GGAAGACAAA CACGGGTCAG AACCCATACT CTGCGGGCCT      360
TGAAATGGAA AATCTCTCCT CTAGACAGAC TCATCCTGGC CGTAAATATC AGGAGACTCG      420
AG
```

(2) INFORMATION FOR SEQ ID NO:899:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 806 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:899:

```
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      60
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      120
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      180
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      240
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      300
NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN      360
NNNNNNNNNN NNCNTTGCAN GNTTTGGTTC CNTTTNTTCC TGTTTNTTT TTTTGCACAA      420
TATTTCAAGN TTTACNAGGC ATACATCAAT CCAAGTTCGG AATTTTAATT AAGAATTCGG      480
CGTTCATGGC NTAAAAGAAN TTGATGCTAC CCCCGGAAAT GCCAGAAGAG GANATACATT      540
GAAATAGACN GTGATGAAGA GCCCAGGGGT GAATTACTTT TTNTTCGGGA CANTGAACGC      600
NTTCATAAAA AGCCAAAGTC TGACAAAGAG ACAAGAGTNG CAANTNCAAT GGNTGGANAG      660
ACAGACCGAA AAGAATTTNT GAGGAAGAAA ACCAAAACAA ATCCATNNTC CAGNTCGACA      720
AATNAAGAGA AGNAAANACA GAAGAACTTT ATGATGATGC GGTATAGCCA GAATGTCCGG      780
TCAAAAATA AGCATTCTCT CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:900:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:900:

```

GAATTCGGCC TTCATGGCCT AGGAGGGCCT GTTTCAGAAT TGCTTTAATA GTTCCCTTCC      60
AGTTGAATTT ACCTTTTGCA GGAGCCTCAT CGTCTTCTGG TTCTCCGCCC TCAGGATGCT      120
CTGGGAGCTT CATCTTTTTC TTCTTAGAAT CTGTTTCAAC TTCCGAGTGC CTCGCTTCC      180
TCTTCCCTGC CCCACGCGTG CCTCTTCCTC ACTGGCGCTG TCCTTGGCT GCTTCTTCTT      240
CTTGCTCCTC TTCCCTGCAG AGCCATTGGC CTCAGGGACT TCCTCCCAAC CAGCCTCAAG      300
GTCAGCCTCC TGCCTCGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:901:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 297 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:901:

```

GAATTCGGCC TTCATGGCCT AAGAAAAGAC AAGGTCCCCA TAAGAGTGGC GAGAGGAACA      60
GAGCCAGGAC ATCGGAAAGC AAGCCCCTGT GTTCCCAAAC CGCAGAAGAG GGAGCTCTGA      120
TGTTAGACAA GCCACCTTCC TACAAGCGAA GGGAAAGTAA CTTTGAGCAA AAATGAGCAA      180
CAGAAAATGA GATCAAGGTC AGATCTCATA CAAAGTTGCA AGATGAAAGA ATGAGCAGCA      240
GAATAACCTC CCTGTGATGT GGAAAGTGTG CCAGGAAAAC AGACCCAAAC GCTCGAG       297

```

(2) INFORMATION FOR SEQ ID NO:902:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 429 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:902:

```

GAATTCGGCC TTCATGGCCT AGGGGTTCTT TCTCCTGCAC GATGCCAGGT GGTACTGGAA      60
TCTGCTGAGT GGGATTCGGT GGTGAGGATC ATAAGGGCAA ATTTCAAAGG CTTCTGGCTC      120
CATGAGAAAT TCTTGAAGCA GGCTATCTCA CTGCTAGAGT CTAACGGAAA TGCTTCTTGT      180
GGAGAAGCCC TTTTGTAAGA AGGATGGAGT TGTCTCTGTC CCAGTTTGG CCCTTGGGAT      240
TCTGTAGGTG ACGGTCTTAA CTTGTGGTCT GTTCTCTAGG ACTGTGAGTG GTGGATTAGA      300
AGAGAGATGA GGAGCTGCCA AAAGCAGCTA CACAGAGAAC AGAGTTAGCA AATGGCAGCC      360
GAGACAGAAC TATAGCAGAT GCAAGAGCCA AAAACCCACA GCCGCATTGA ATTCTAGACC      420
TGCCTCGAG                                     429

```

(2) INFORMATION FOR SEQ ID NO:903:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 307 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:903:

```

GAATTCGGCC TTCATGCCTT GTAACCATCA GGTAGATACA GCACCAACGG TAGTGGCTCT      60

```

```

TTATGACTAC ACAGCGAATC GATCAGATGA ACTAACCATC CATCGCGGAG ACATTATCCG      120
AGTGTTTTTC AAAGATAATG AAGACTGGTG GTATGGCAGC ATAGGAAAGG GACAGGAAGG      180
TTATTTTCCA GCTAATCATG TGGCTAGTGA AACACTGTAT CAAGAACTGC CTCCTGAGAT      240
AAAGGAGCGA TCCCCTCCTT TAAGCCCTGA GGAAAAAACT AAAATAGAAA AATCTCCAGT      300
CCTCGAG                                         307

```

(2) INFORMATION FOR SEQ ID NO:904:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 322 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:904:

```

GAATTCGGCC TTCATGGCCT AGGACCTCGT AGGTCCCTAC AGCACCACAG TGCTCTTCAT      60
CTCTCAGAGG ACTGAACCAC CAGCCAGCAC CAACAGAGAC ACTGTGGAAA GCACAAGGAC      120
CCGACGGGCA CTGAGTGACG AGCAGTGTGC TGCCGTCATC CTGTGTCTGT TTGCTTTCTT      180
TTCCATTTTG ATTGCCTTTA TCATTAGTA CTTTGTAATC AAGTGAATAA ATAACTTTAT      240
TTTTTAACTC TATTACATTT TATTTGTCA TGTACTAAAA TTATTCTGT ATTGCTTTNA      300
TAAAAAACAG TGGCACCTCG AG                                         322

```

(2) INFORMATION FOR SEQ ID NO:905:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 318 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:905:

```

GAATTCGGCC TTCATGGCCT AAAAAACAC ATAATTGAA TCAACACAAC CACCCACAGC      60
CTAATTATTA GCATCATCCC TCTACTATTT TTTAACCAA TCAACAACAA CCTATTAGC      120
TGTTCCCAA CCTTTCTC CGACCCCTA ACAACCCCTC TCCTAATACT AACTACCTGA      180
CTCCTACCCC TCACAATCAT GGCAAGCCAA CGCCACTTAT CCAGTGAACC ACTATCACGA      240
AAAAAATCT ACCTCTCTAT ACTAATCTCC CTACAAATCT CCTTAATTAT AACATTCACA      300
GCCACAGAAC AACTCGAG                                         318

```

(2) INFORMATION FOR SEQ ID NO:906:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:906:

```

GAATTCGGCC TTCATGGCCT ACAGGAAACA TACAAAGCTG CTCATAGTGG GAGTCTTTT      60
GCTCATGTTT GTGTGCGGCC TCTTCTTCA TCGACCTTCA GGCAGCTACT TCATCAGACT      120
GCTGAGTGAC TACTGGATAG TCTTCCCAT CATCGTCGTT GTCGTATTTG AAACCATGGC      180

```

TGTATCCTGG	GCCTATGGGG	CCAGGAGGTT	CCTTGCAGAC	CTGACGATCC	TGTTGGGCCA	240
CCCCATCTCT	CCCATCTTTG	GTTGGCTGTG	GCCCCATCTG	TGTCCAGTTG	TGCTGCTAAT	300
CATCTTTGTG	ACCATGATGG	TTCATCTTTG	TATGAAGCCG	ATCACCTACA	TGTCCTGGGA	360
CTCAAGCACC	TCAAAGAGGG	TGCTTCGACC	ATACCCACCG	TGGGCACTGC	TCTTGATGAT	420
CACCCTTTT	GCCATTGTCA	TCCTCCCCAT	CCCTGCATAC	TTTGTATACT	GCCGCATACA	480
TAGGATTCCC	TTCAGGCCCA	AGAGCGGAGA	CGGGCCTATG	ACAGCCTCCA	CATCCCTACC	540
CCTAAGTCTC	GAG					553

(2) INFORMATION FOR SEQ ID NO:907:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 557 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:907:

GAATTCGGCG	TTCATGGCCT	AGTAGAGAAG	ANNNTATTGC	NCTGACAATG	AGGTTTCTAC	60
GTTCACTGGC	AAGAGTTTTT	GTTATTCTGA	GTGTGGAAAT	GGCTTCATCC	AAAAAGAAAA	120
ACAACTTTAT	TCCACAGCCA	ATTGGAAAAT	GCAAGCGTGT	ATTCCAAGCA	TTGCTACCTT	180
ACGCTGTGGA	AGAATTGTGC	AACGTAGCAG	AGTCACTGAT	TGTTCTGTCT	AGAATGGGGA	240
TTGCTCGTCC	AACTGCACCA	TTTACCTGG	CTAGTACTAG	CATAGATGCC	ATGCAGGGCA	300
GTGAAGAATT	ATTTTCAGTG	GAACCACTAC	CACCACGACC	ATCATCTGAT	CAGTCTAGCA	360
GCTCCAGTCA	GTCTCAGTCA	TCCTACATCA	TCAGGAATCC	ACAGCAGAGG	CGCATCAGCC	420
AGTCACAGCC	CGTTCGGGGC	AGAGATGAAG	AACAGGATGA	TATTGTTTCA	GCAGATGTGG	480
AAGAGGTTGA	GGTGGTGGAG	GGTGTGGCTG	GAGAAGAGGA	TCATCATGAT	GAACAGGAAG	540
AACACAGGAA	GCTCGAG					557

(2) INFORMATION FOR SEQ ID NO:908:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:908:

GAATTCGGCC	TTCATGGCCT	AAAAAAGTCA	GCCAGGTGTG	GTGATGTGCG	CCTGTGGTCC	60
CAGGTATTCA	CGAGCTGAGG	TGGGAGGATC	ACCTCAGCCC	GGGAGGTGGA	GGTTCAGTGC	120
AGCCCATATC	CCGCCACTGC	ACTCCAACCT	GGGAGACAGA	GCGAGACCCT	GTCTCCAAAA	180
AAAAAAAAAA	AAAATCCGGG	ATCTATTTAT	GTAACACTA	GAATCTTAAG	TTCAGAAATT	240
ACTCCATAAG	AGTATATAAA	AAACTTACTG	TGATTTTATC	CATGTTTTTC	CTAATATATA	300
ATAGGTCTAA	GTCTTGTA	TTTCTGTCT	GTCCACAGAG	CCTTGAAAT	AATTAGAGC	360
TCAGTCATTC	AGTTTGGATT	TATGTATAAA	TTGAAATATA	TTAATTACTT	ATTATAGTGC	420
CAGCTCGAG						429

(2) INFORMATION FOR SEQ ID NO:909:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 180 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:909:

GAATTCGGCC TTCATGGCCT AGTCCCTGAA AAAAAAAAAA GAAAAAAAAA ATTTAAATAG	60
AGGAAATACT AGCTAAGTTT AATGTAGGCC AGTTCTAAAA TAATGATTTA TTGCTGCTGT	120
TGTTACATAA TTTTCTTAAA TATTTTAAAG ATTGCACACT GTCTGCTCGT AGGCCATGAA	180

(2) INFORMATION FOR SEQ ID NO:910:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 387 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:910:

TACCTGCAGT TGTACCGGGT CACATGTGAC CAAACCTACC TGCTCCGATC CCTGGATTAC	60
GTAAAAAGAA CACTTCGGAA TCTGAATGGC CGCAGGGTCA CCTTCCTCTG TGGGGATGCT	120
GGCCCCCTGG CTGTTGGAGC TGTGATTTAT CACAAACTCA GAAGTGACTG TGAGTCCCAG	180
GAATGTGTCA CAAAGTGAGT TTTAGAACTG GAAACATTTT CTCCCAATTC CCAGTGGAAG	240
CTCTTGCTGT AGAAAGATAT TCAGAAAGGA AACTATTTT CCATTCATCC ATTGTTGTAA	300
ACAGATCACT CCAAATGTT AATCTTGAGC ATAGTGGTGG GATCATATGC CCTCTTTTAA	360
TCCAAGCATG TGTGTGCCGG TCTCGAG	387

(2) INFORMATION FOR SEQ ID NO:911:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:911:

GAATTCGGCC TTCATGGCCT AGTGTCTTGA CAATGGTTGA GCTGGTTTGG ATCAGAGGAA	60
CATTATTGTA ATAACGATGG AAGGAAAAAA CAGTGCTGTA ATAAGTCGCT TCTTAAATG	120
TGGGGTGTTA TTAAGAAGAT AATGGGAAAG TGCTACTGGG AAGGCAAACA CAGCAATTGT	180
ACTCTACAGA CAGGGATTCT CCTATTGGCC ATTTAGAAA CATTCCCAG GCAACATGAG	240
ATTATCCAAG TGGAGAGAAC CAGAGTCAGA GCCATTTTCT AGGCCGACAG AGCAGCGCTC	300
CAGATGAGAT ACTGAAGGTT TGAAGTCAAG TGATGGCAGT AAGATCAGAA AGCAAAAGGC	360
ATATCACAAA GAAACATAA GATTCTCCAT CTGGATATAT AGAAGATAAA TGGAAAGAGA	420
AACTCGAG	428

(2) INFORMATION FOR SEQ ID NO:912:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 357 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:912:

GAATTCGGCC	TTTCATGGCCT	AGAAAACCAA	ATACTGCATG	TTCTCACTCA	TAGGTGGGAA	60
CTAAACAATG	AGAACACTTG	GACACAGGGC	TGGGAACACC	ACAACCTCTT	TTTCAGTTCA	120
TAACTCATAG	TCCACGATCC	ATGTGCTCTT	TGACTTGACT	TTTCTTAAAC	TCCTATTTTA	180
TGTGCTTCTG	ACTTGCTTTC	CCTTCTTATT	TGTAATCCAC	ACTAGCCTCA	AAAGATGCAT	240
GAAGTGTGAA	TTTTCACCTC	CAGGGCCATG	GATAGTTGAA	CATCTAGTAG	TGAATTTCTC	300
CTTTCAGAAG	ATAAATAAAT	TCATTCATTC	CCCTGGATCT	AGAAGGACAC	ACTCGAG	357

(2) INFORMATION FOR SEQ ID NO:913:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:913:

CAGCCTGGGT	GGCAGAGCAA	GACTCCATTT	CAAAAAAAAA	AAAAAAAAGC	CCAAGTCACT	60
TGCTGTTTCT	GGATCCAGTA	ACGCTGCCTC	AAATTTGATT	CAGTCACCTC	ACATACTTAA	120
CATTCTGGCT	TTCTTTCTCT	CTGTTTCTGG	CATCTGGAGA	TTTCTTTTTT	TTGTGTGTGA	180
GCTCATTTAT	GGTTATCTGT	TGTTATGTTT	AATACAACCA	TTCTGGCTG	AGGCTGCCAC	240
ATCTAGAGCT	GGTAAACTCG	AG				262

(2) INFORMATION FOR SEQ ID NO:914:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 471 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:914:

GAATTCGGCC	TTATGGCCTA	GTGATATGTC	ATAATCCCTT	CTGTGGGCTG	GGCCACATA	60
AGGAGAGTCA	AATCACTTGG	GTGCTGGGAA	GAGGCACATG	TCACACGTGC	AAGAAGGTCC	120
AAGGATGAGA	TTAAAAATTC	CACAAAGGTC	CAAATTTCTAG	GGCCAGACA	GAAGAGAAGA	180
GTACATCAT	CTAGATGATG	AATGAAAAGA	TATGTCATTA	TTCTCCTTTG	GGCAGTGCTT	240
CTGCAGAAAA	GTTGCACCTT	CTAGGTGTTG	GACTCAGCAA	TATATCACAA	TGTCTGCAGT	300
ATTTTGAAG	GAGAGGAGAG	TCACCATTAC	TTAGGTGCTA	GGCCAGCAA	TACATCTCAA	360
GCACTTCTTG	GGCAAAGCCC	AAGCAGTAAA	AAAGAGTCAC	ATTACCTAGG	TTCTGGGTAT	420
AGCAATATGT	CACAAATGCC	CCTAAGAAGA	GGGCCAGGA	AAAGACTCGA	G	471

(2) INFORMATION FOR SEQ ID NO:915:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 452 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:915:


```

GAATTCGGCC TTCATGGCCT AGAGTGCCTG ACCTTCCCTG TTCAAGAATT TATAAGATT      60
CCTAACAGCA ATTCTAGAAA AAGGATAAAG ACCTCCACTT GGCTTTCAGA AGCCTCCAGC      120
ATCTGGCCCA AGCTAATACA GCCTTAAAC TAATCTGGTT ATAGCCCAGC CCCTCATTTT      180
ACAAAGAAAA CTGAGACCCC TGGCTATCTA TTAACGCT CCAACCAAAAC ACATCATCTA      240
TCCCCTCTCT TCCTCCAGAT AACACTCACT TACCAGGCTA CAGTGAGGTC CACGTCTCTG      300
ATATGAGGCT CCTGTCCACA AGTTTGGTAA CCTTCATCTG CCTCATCACC AGTGAGCACC      360
CAGCACTTAG CACTGTGCCG GACACAGAAA TGAACACTCT GCTCCTCCGG GCCGGCGTGG      420
GTGCGCCGCT GCGGCCACCG GCAGCGCTCG AG                                         452

```

(2) INFORMATION FOR SEQ ID NO:916:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 463 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:916:

```

GAATTCGGCC TTCATGGCCT ACAAATGGTT GGTTTATGTT ATGATAGCAA TTTTCTGCAT      60
AGCATCAGCA ATGAGTCTGT ACAACTGTCT TGCTGCACTA ATTCATAAGA TACCATATGG      120
ACAAATGCACG ATTGCATGTC GTGGCAAAAA CATGGAAGTG AGACTTATTT TTCTCTCTGG      180
ACTGTGCATA GCAGTAGCTG TTGTTTGGGC TGTGTTTCGA AATGAAGACA GGTGGGCTTG      240
GATTTTACAG GATATCTTGG GGATTGCTTT CTGTCTGAAT TTAATTAAAA CACTGAAGTT      300
GCCCAACTTC AAGTCATGTG TGATACTTCT AGGCCTTCTC CTCCTCTATG ATGTATTTT      360
TGTTTTTATA ACACCATTC ACAAAGAA TGGTGAGAGT ATCATGGTTG AACTCGCAGC      420
TGGACCTTTT GGAAATAATG AAAAGAATGA TGGAAATCTC GAG                                         463

```

(2) INFORMATION FOR SEQ ID NO:917:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 390 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:917:

```

GAATTCGGCC TTCATGGCCT AACGTACTTG AAAAGGCTTT CCTTTACACT TCCAGGACCA      60
AACAGCAACT TCCTGCCACA CACTTCCACC CTATCACTGG GAGAAATCCT TTTCTGGACA      120
TGAGCCTTTG ACCTGGGTGG GGCAGAAAGA ACCACAAACT CCATCTCCCA ATAGAATTT      180
GAAATTCACT CAGCTTTTCC TTTCATGCTG TTTGTGCTG GCTTGTGCA CTCCTCCTGC      240
CCCAGAACTG CAAGATTTT AGCTTCACCC CTTTCTGAGA GTAATGTTAT CTTTATCAG      300
AATCAGTATC AGTTCCCTG TATTCTGTGC TTCATCGAAT TTGCAAGACT GACCTCTTTT      360
AAGCATTTAA TTCACTCCCA GAATCTCGAG                                         390

```

(2) INFORMATION FOR SEQ ID NO:918:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:918:

GAATTCGCCT	TCATGGCCTA	CAGTGACAAT	GAACAAAACC	AGCACACCAC	ACAAATGAGT	60
GATGAGGAAG	AGGATGATGA	TGGCTGTGAC	CTTTTGCTG	ACTCTGAGAA	GGAGGAGGAA	120
GATATTGAGG	ACATTGAAGA	AAATACTAGA	CCTAAAAGAA	GCAGACCTAC	ATCGTTTGCA	180
GATGAGCTGG	CTGCCGCGAT	CAAGGGGGAT	GCCATGGGTC	GAGTGGACGA	GGAGCCGACA	240
ACCTTACCCT	CAGGAGAAGC	AAAACCTCGG	AAGACACTCA	AAGAGAAGAA	GGAAAGGAGA	300
ACTCCTTCAG	ACGAGTCTTC	ATCATCCAAA	CCTGGAAAGA	AAATCCCAGC	AGCTCTCGAG	360

(2) INFORMATION FOR SEQ ID NO:919:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 279 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:919:

GAATTCGGCC	AAAGAGGCCT	AGTGCTATTG	AAACATTGGT	AACAGCAATT	TCTTTAATTA	60
AACAATCCAA	AGTCTCTGCA	GATGATCGTT	GCAAAGTTCT	TATTAGTCT	CTGCAGGATT	120
GCCTTCATGG	AATCGAGTCC	AAGTCTATG	GGTCTGGATC	CAGACGTGAA	CGATCAAGAG	180
AACGGGACCA	TAGTAGATCA	CGGGAAAAGA	GTCGTCGCCA	TAAATCTCGG	AGTAGAGATC	240
GCCACGATGA	CTATTACAGA	GAGAGAAGCA	GAGGTCGAG			279

(2) INFORMATION FOR SEQ ID NO:920:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:920:

GAATTCGGCC	TTCATGGCCT	ACAGAACTTG	AAGCCATCAA	TAAAAGAGTA	AAAGACACTA	60
TGGCACGATC	AGAAGATTG	GACAATTCCA	TTGATAAAAC	AGAAGCTGGA	ATTAAGGAGC	120
TTCAGAAGAG	TATGGAGCGC	TGGAATAATA	TGGAATAAGA	ACATATGGAT	GCTATAAATC	180
ATGATACTAA	AGAACTGGAA	AAGATGACAA	ATCGGCAAGG	CATGCTATTG	AAGAAGAAAG	240
AAGAGTGTAT	GAAGAAAATT	CGAGAACTTG	GATCACTTCC	CCAGGAAGCA	TTTGAAAAGT	300
ACCAGACACT	GAGCCTCAA	CAGTTGTTTC	GAAAACCTGA	GCAGTGCAAC	ACAGAATTAA	360
AGAAGTACAG	CCATGTTAAC	AAAAAGGCTT	TGGATCAGTT	TGTAAATTTT	TCCGAGCAGA	420
AAGAAAAGTT	AATAAAGCGT	CAAGAAGACT	TAGATAGGGG	CCCCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:921:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 455 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:921:

```

GAATTCGGCC TTCATGGCCT AGCAGTGGCG TTGGAAGGAG ACGCGGAGGG GCAGTGGCGT      60
TGGAAGGAGA AACGGAGGGG CAGTGGCGTT GGAACGGGGG CAGTGGCGTC GGAAGGGGAC      120
GCGGAGGGGC AGTGGCGTTG GAAGGAGAGA CCAGGGCCGC GGGGCTGCTT CTTGTAAAGG      180
GCCAAGCTGT GAGGACTTCG GGCTTTGCGG CCGCTTTTGT CTATGTCCCA TCTCCTTCTT      240
TGTTTTGTTT TTCTCAAACC CTTTAAAAAC GTGAAAACCA TTTCTAGCTT GGGGGCCCTA      300
TAAAAATAGG CCTCGCTGGC CCTAGTTTGA TGACCCCTGA AACAGACAAT TCAAGGAGAA      360
GCTTAGTGAA AGAGTCACTT ATAGCTTCAT AAAAATAAGA GAAGATATAG TATCCATAAA      420
ATAATAATAA GATTGTATCC ATGAGGTTCC TCGAG                                     455

```

(2) INFORMATION FOR SEQ ID NO:922:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:922:

```

GACATGACCC TGGACAAAGA ACAAATAGCG AAGGATTTCG TTTCAGGGGA AGAAGAGGAA      60
GAGACGCAAT CATCTGCTGA CGACCTCACC CCGTCCGTGA CCTCCACGA GGCCTCCGAC      120
CTCTTCCCTA ACCGGAGTGG ATCTCGTTTC CTGGCTGATG AAGACAGAGA GCCTGGCTCT      180
TCTGCCTCCT CCGACACCGA GGAGGACTCT CTTCTGCCA ACAAATGTA GAAGGAGATC      240
ATGGTGGGAC CTCAGTTCCA AGCTGACCTC AGCAACCTGC ACTTGAACCG GCACTGTGAG      300
AAGATCTACG AGAACGAAGA CAAGCTACTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:923:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:923:

```

GAATTCGGCC TTCATGGCCT AAGCAGCCTT TCACCAGGGC TCCATCTGTG AAGAGTCTCA      60
GCCATGACTT TGAGCTGAGC TTGGGAGAAG TAAAGCAACT GTTAAGGCCA GCCCTTGCCC      120
CTCAGACCTG CCATGAAAGG AATGAGCCCT AGACTGACTC CTGCAGCACC CCCGGGACAG      180
GCTGGGACCA GCTGTTTGTC TCCAGGTGTC AGAGTCCTC CTCCTCCTCC AACCTCTCCA      240
TTGAATTCTA GACCTGCCTC GAG                                     263

```

(2) INFORMATION FOR SEQ ID NO:924:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:924:

```

ATTTTGGGGA CCAAGAACCT GTACAAGGAT TTGTGATGAA CTTTTC CAAT GGGGAAATTA      60
TCGACATCTT CAAGCCAGTG CGCAAGCACT TTGATATGCC TCATGATATT GTTGCACTCTG      120
AAGATGGGAC TGTGTACATT GGAGATGCTC ATACCAACAC CGTGTGGAAG TTCACCTTGA      180
CTGAGAAATT GGAACATCGA TCAGTTAAAA AGGCTGGCAT TGAGGTCCAG GAAATCAAAG      240
AAGCCGAGGC AGTTGTTGAA ACCAAAAATGG AGAACAAACC CACCTCCTCA GAATTGCAGA      300
AGATGCAAGA GAAACAGAAA CTGATCAAAG AGCCAGGCTC GGGAGTGCCCT GTTGTTCCTCA      360
TTACAACCCT TCTGTTTATT CCGGTGGTTG TCCTGCTGGC CATTGCCATA TTTATTCGGT      420
GGAAAAATC AAGGGCCTTT GGAGCAGATT CTGAACACAA ACTCGAG      467

```

(2) INFORMATION FOR SEQ ID NO:925:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 310 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:925:

```

GCCATCCTCT GACAAAAGAA AGAATATGTA CTCAGGTGGA GAGAATGTTT AGATGAATGG      60
GGATACGCCC CATGATGGAG GTCACGGAGG AGGAGGACAT GGGGATTGTG AAGAATTGCA      120
GCGAACTGGA CGTTCTGTG GTGGAATAAT TAAAGACATA AAGAGGAAAG CGCCATTTTT      180
TGCCAGTGAT TTTTATGATG CTTTAAATAT TCAAGCTCTT TCGGCAATTC TCTTCATTTA      240
TCTGGCAACT GTAACATAAT CTATCACTTT TGGAGGACTG CTTGGGGATG CCACTGACAA      300
CATGCTCGAG      310

```

(2) INFORMATION FOR SEQ ID NO:926:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 287 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:926:

```

GAATTCGGCC TTCATGGCCT AGTGAGACC TGGCCAAGGT ACAGAGAGCT GTGTGCATGC      60
TGAGCAACAC CACAGCCATT GCTGAGGCCT GGGCTCGCCT GGACCACAAG TTTGACCTGA      120
TGTATGCCAA ACGTGCCTTT GTTCACTGGT ACGTTGGGGA GGGGATGGAG GAAGGTGAGT      180
TTTCAGAGGC CCGTGAGGAC ATGGCTGCCC TTGAGAAGGA TTATGAGGAG GTTGGTGTGG      240
ATTCTGTTGA AGGAGAGGGT GAGGAAGAAG GAGAGGAAAA CCTCGAG      287

```

(2) INFORMATION FOR SEQ ID NO:927:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:927:

```

CCGCGCACCA ACAACAGCAA CAACTCCACT GCGCCGGGCT GAGGAGCAGG AATTAGGAGC      60

```

```

TCGCGAATAA TATGAAAGGG ATCCGCAAAG GGGAAAGCCG AGCAAAGGAA TCCAAACCCT 120
GGGAGCCTGG CAAGCSAAGA TCGCTAAAT GTGGCCGCGT AGACTTCATC CTGATGAAGA 180
AAATGGGGAT TAAAAGTGA TTTACGTTT GGAACCTCGT CTTTTATTG ACGGTGTCTT 240
GTGTGAAAGG TAGGTCTGCT TTGGGGGTCC CTTCCGCTTT GGATGGAGGT GGGCTGACTT 300
GTAGATGGAG AGAGGCTGGC AGCTTACTCG AG 332

```

(2) INFORMATION FOR SEQ ID NO:928:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:928:

```

AGCCTGCCAT CCCAGGCTTC AGATTGGAGC CGATACTCAA GCAGCTTACT GGAATCCGTC 60
TCTGTTCTTG GAACACTAAA TGAGGCTGTT GTAATGACTC CATTTTCATC GGAACCTCAA 120
GGAATTTTCA AACAGACCCT CTTGGAGCTG TCCAAAGGAA AGCCCTCCCC GCATCCCAGA 180
GCCTGGTTTG TGTCTCTTGA TGGAAAGCCA GTTGCAACA TGAGGCACTC CTTTATAGAC 240
CTGAAAAGG GCAAGAGAAC CCAGAGCAAT GACACCAGTC TGGACTCTGG GGTGGACATG 300
AATGAGCTTC ACTCAAGTAG AAAGCTCGAG 330

```

(2) INFORMATION FOR SEQ ID NO:929:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:929:

```

GAATTCGGCC TTCATGGCCT AGTGAGTGGG TGATATCTGT AAAGTGCATT GTCTTCAGTT 60
GTAGGTGGGG TAGGTGTAAG GGAATGCCGG GGGGGCATGC AATATGGGTG AGGGAGGGCA 120
GTGCCCTTCT CATCCAGAC CTGAGCCCCC CCCAAAACCT GTCTGGACTT TGATCAGGAT 180
AAGAACGTTG CAGGGCGAGG CAAGTTCCTG AAGCCGAAGA GGTCTGGGCT GGGGCCTACT 240
GGAGAAAGGG CATAGACTGG CTCGAG 266

```

(2) INFORMATION FOR SEQ ID NO:930:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:930:

```

GCGAAAATAA CCTTTTCTAA TGAGGATGTC TGATACTGTT ACTGTAAAAG ATGAACTGC 60
AACAAATGAAG GATTGGAGG CAGAAGTGAA AGATACAACC AGAGTTGAAA ATCTTATCAA 120
ATCAGAAAAC TATGGGAAGA TTTTGGTAGA GAAGAATGAA CATTGTATTG AGAACAATAT 180
AGATTTCAG GAGAAAATTC AGATCCAGTT AACACAATCA TTTGAGAAAG AAGAGAAGCC 240

```

CTCAAAGAT GAAGCAGAAA AAGAAAAGGC CAGTGATAAG TTGCCAGAA AAATGTTATC 300
AAGAGATCCC AGTCTCGAG 319

(2) INFORMATION FOR SEQ ID NO:931:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:931:

GAATTCGGCC TTCATGGCCT AAAGAAGAGC AGGAAGTCCA ATGTGGCCGA AGCAGAGTGA 60
GCAAGGGCAG GAGTACCAGA GGAGGAGATA GGACGCCAAA GAGTTAAGAA AAGGAGGAAT 120
GCAGAACCTT TCCATCAAAA ATAAAAATAT ACATAACCAT GGTATGTGG GGTGGGGTTG 180
TCTCTTTCTT TTGGAAGAA GAAGGGCTTT CTGGGAATAG ATGGCCAGGC CAGGCAGCAA 240
GCTGCTAAAC TCGAG 255

(2) INFORMATION FOR SEQ ID NO:932:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 588 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:932:

GAATTCGGCC TTCATGGCCT AGCATTTCCT AAAATTCAGT GCAAGCGCCA GGCATTTGT 60
GTCTAAGGAT ACGATTTTGA ACCATATGCG CAGTGACAA AATATGAAAC AACTGTTTCC 120
ACACTTGCAC CTGATCAAGG AGCAGTGCTT CTCCATTGT TTTGCAGAGA AATGTTTTC 180
ATTTCCTGTG TGTTCCTATT TCCTTCTGAA ATTCTGATT TATCCATTTT TTTAAGGCTC 240
CTCTTTATCT CTTTCTTAA GGCAGTGTG CTATGGCACT TTTCTATAAC CTTTTCATT 300
CTGTGTACAG TAGCTTAAAA TTGCAGTGAT TGAGCATAAC CTACTTGTGT GTATAAATTA 360
TTGAAATCCA TTTGCACCCT GTAAGAATGG ACTTAAAGT ACTGCTGGAC AGGCATGTGT 420
GCTCAAAGTA CATTGATTGC TCAAATATAA GGAATGGCC CAATGAACGT GGTGTGGGA 480
GGGGAAGAG GAAACAGAGC TAGTCAGATG TGAATTGTAT CTGTTGTAAT AAACATGTTA 540
AAACAAACAA AAATTGTTAT TTTCTTTTC CTTCGGTCAG AGCTCGAG 588

(2) INFORMATION FOR SEQ ID NO:933:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 520 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:933:

GAATTCGGCC TTCATGGCCT AGGGGAAGGA AAGGCCCGTG TGGAGGAGCA TGGAGCCATC 60
TGCTCATGAA GGAAAGGCAG GGATGGGGCA GAGGTGTGG GGCTCCCGTG CGACTCCAGA 120
GGCCAAGCCC AGAGCTGTGT GTGGAGCCCA TGAGGAGCAG AGATTTTCCA GCAAAGGTGC 180

```

ATTGTGGGC CTCCAGATGG AGGCCCTACC TTCTCAGCAA GGAAGAAAC CCCTCTCTCT    240
TTGACCTCTC TCCCCTGCAC AATTAGAAGG TTCTGAAGAG TGACTTCATT ATTGGTGGGT    300
GAGTATATGT TTATTGGGCA TCTGTGGTGT GCCAGATGTT GTGTTGAGTG CTGGGTGCAG    360
AGGTAAATGG GATATCTGGT TACCGCCAC ATGGGGCTTA TAGTGGGGGA AGTGGGGGAG    420
TAAGTCAGGA CACACGTAAG CAAACGCTAG AATGGATAGA TATTGTGATT AGAGCATTGG    480
AGAGAAAGAA CAGGATGTTT CAAGAAAGGA CAGTCTCGAG                    520

```

(2) INFORMATION FOR SEQ ID NO:934:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:934:

```

GAATTCGGCC TTCATGGCCT ACTTTTTTTC TCAAGGTGCA ATGAAAGCCT TCCACACTTT    60
CTGTGTTGTC CTTCTGGTGT TTGGGAGTGT CTCTGAAGCC AAGTTTGATG ATTTTGAGGA    120
TGAGGAGGAC ATAGTAGAGT ATGATGATAA TGACTTCGCT GAATTTGAGG ATGTCATGGA    180
AGACTCTGTT ACTGAATCTC CTCAACGGGT CATAATCACT GAAGATGATG AAGATGAGAC    240
CACTGGGGAG TTTCTCGAG                    259

```

(2) INFORMATION FOR SEQ ID NO:935:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 413 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:935:

```

AACAAATGA AACAAACAAA AGACAGAGGC CAAGAAAGGC TAAGTAACCT GCCTAAGACT    60
ATATAATAAG TCACAGGGCA GGAATAAAA CTCAGTTTTC CTGACTTCCA TTAAGTTTGT    120
CTTTTCCTCA CTCCACATTG CCTGTCAITT TTTTCTGAT TATTCTTAAG AAGGAGTGAG    180
GAGAGAGAAT AGAGAAACAG ATTTTCTTCT CGGACTATCT TTTCTGTAGG GAAAAACAC    240
TGAAGCCCTA TTAGCCTGGA AGCTGCTTAT AGGGTTACAA TACTGTGTGT CCTGCAGAAC    300
CTGTGAAGCT CTTCTGTATT TTCTGGACTT TCCTGGAAG TCATTTAGAT ATAATGTAAT    360
AAATATAATA AAGTAGTTTA GATATAATGA GGTTCATCAAT AGGCTTCCTC GAG        413

```

(2) INFORMATION FOR SEQ ID NO:936:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 259 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:936:

```

GAATTCGGCC TTCATGGCCT ACCCTGAGAG TAAGCCAAAA AAGGAAGAAA AAAATATGGA    60
AGTAAATATG AAAGAGTGGA TTTTACGATA TGCTGAACAA CAAATGAAG AAGAAAAGAA    120

```

TGAGAATTCT AAAAGTTTAG AAGAGGAGGA AAAATTGAC CCTAATGAAA GGTACTTACA	180
TCTTGCAGCA AAACGTCTGG ATGCAAAAGA ACAAGCAGCT ACCTTTAAAC TAGAAAAAAA	240
CAAGCAGGGC CGTCTCGAG	259

(2) INFORMATION FOR SEQ ID NO:937:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 263 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:937:

GCGAAACCGT GGTGAGCTGC AAGAAGGCAC AGGAGAACAT GAAGCAAAGG CACGAGAACG	60
AAACGCACAC CTTAGAAAAA CAAATAAGTG ACCTTAAAAA TGAAATTGCT GAACCTCAGG	120
GGCAAGCAGC AGTGCTCAAG GAGGCACATC ATGAGGCCAC TTGCAGGCAT GAGGAGGAGA	180
AAAAACAAC T GCAAGTGAAG CTTGAGGAGG AAAAGACTCA CCTGCAGGAG AAGCTGAGGC	240
TGCAACATAA GAGGGAGCTC GAG	263

(2) INFORMATION FOR SEQ ID NO:938:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 384 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:938:

GAATTCGGCT TCATGGCCTA TTCCACTACT AGGCTGACAT GCAAAATCCT AAGAGAAGTC	60
AGTCTTCCAG GATTGATCCT GGCATTGTG CTTGCTGTTT CCCGTGCCTG GAGCACCTGT	120
CCCAGCTCCC CTGTGGCTGG CTCCTTCTCA CCATCCAGGG TTCAGTCCAA ATATCTCCTT	180
CAAGAGAGA TCTTCCAGGG TCACCTAATC CAGAGAGTGC CCTCTATGTT TGCCACATCC	240
CCCCGACCCA CCACCCACCA CCCCCACTT CAACTCCTTT ATGGCACCTG CCCCTCCCTG	300
AAATTCTCAC TGTGCTTAT TTGTTATCTA GCCCTCTCAT CAGAATGTAG ATCCACTGGT	360
GACAGGGGAC TTGTGTGCCT CGAG	384

(2) INFORMATION FOR SEQ ID NO:939:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 262 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:939:

GAATTCGGCC TCATGGCCT AGTGTGTTTT TTTGGGCTTG CTATTAATGC AAACCTGAT	60
TGCAAAATGGA TGTGATGTTT CATACCTTTT TTATCAGGAA AAAAGCAGCA AGCCTTCAGG	120
TGTTCCAGTG ATGCCTGACA CAATTGAGCT GGACTTTATG CTGCTCTTTA CAGTAAGAGG	180
TGTTGCATTG TATGTGGGGA CTATGTGCAC TGGCGTCTAA GACAGTGACC TCAACAATAT	240
TAGCTTTGCA CAAACCCTCG AG	262

(2) INFORMATION FOR SEQ ID NO:940:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:940:

```

GAATTCGGCC TTCATGGCCT AGTGGAGGAC TGCTTTTGTG AACATGAGAA AGCAGCGCCT      60
GGTCCCTATG TATTGGGTC TTATTACAT CCTTCTTAA GCCCAGTGGC TCCTCAGCAT      120
ACTCTAAAC TAATCACTTA TGTTAAAAAG AACCAAAGA CTTTCTCCA TGGTGGGGTG      180
ACAGGTCTTA GAAGGACAAT GTGCATATTA CGACAAACAC AAAGAACTA TACCATAACC      240
CAAGGCTGAA AATAATGTAG AAACTTTAT TTTGTTTCC AGTACAGAGC AGAACTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:941:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:941:

```

GAATTCGGCC TTCATGGCCT AGTATATCTG AAAAGTACAC TGTGTTTGA AATTATAAAT      60
TTTCATTCTG AATGAGGTTT CTTTTTTGA TTTCTTTAA AAAAAAAAAA CAACCTGCTT      120
TGATTGCTT TACATTCTT GCCCTCCATT TTTCTTATTA TATTGTAAAC ATTAGAAAAA      180
TGAACACCCT CGAG                                     194

```

(2) INFORMATION FOR SEQ ID NO:942:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 581 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:942:

```

GAATTCGGCC TTCATGGCCT AGTGAGGATA AAGATAAGGA ACAGGCCAGG CACAGTAGCT      60
CACGCCTGTA ATCCCAGCAC TCTGAGAGGC CGAGGCAGGT GGATCACATG GGGCCAGGAG      120
TTTGAGACCA GCCTGGACAA CATGGTGAAA CCCCGTCTCT ACTAAAAATA GCCAGGTGTG      180
GTGGCACACA CCTGTAATCC TAGCTACTTG GGAGGCAAGG TGGGAAGTTT GTTTGAACCA      240
GGAGGCAGCG GTTGCACTGA GTCAAGATCA TGCCACTGCA CTCCAGCCTG GGTGACAGAG      300
TACGACTCTG TCCCAAAAAA AAAAAAAG ATAAGGAACA GACCCAACCC GAATCCACAC      360
AACCTGACAC ACAGGAAAGT CTGCCCCATC CATCCACCTA CCTCCCCAAC CAGAGTAGTG      420
AAGCTATAAC CCCAGAGAGA TACCTTTGAT GTGAGCACTG TCCAGCATGG GCACCAAGGC      480
ATTACCTGC TCCAGGAGTG CAACCTGGGA AAGGATAAAC TGTCCTCTA AAGCAAAAAT      540
GGACAAGATA GTTGCACTGA AGCAAACCTG GGCATTGCTA G                                     581

```

(2) INFORMATION FOR SEQ ID NO:943:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:943:

```

GAATTCGGCC TTCATGGCCT AAAACAGGCA ACAATGACCT TTTATTTTCT GTTTGTCCCC      50
ACCTCCCCAG CCTTCCACCT CCTGTTCTTC CTACCTTCTT CCTTTTGGAC TAAATAATCC      120
CCACCTCCCT TGATCATACA GTGAGGCTAC AGTGACTGAG GGGAGAATCC CCTCCTGTTT      180
ACTTCTCCAA CCCTGCTCCA GCCCCTCAGC TTCCAGACC CTCATGCAGT TGGTTGTAAA      240
TTCTCCCACT GAGCTCGAG                                     259

```

(2) INFORMATION FOR SEQ ID NO:944:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 360 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:944:

```

GAATTCGGCC TTCATGGCCT AAAACCTCAC GTGGCCTCTG ATTTTCATTGT GGGTGCATCC      60
ACAGGTGGCC CGAGCTGTTC TTTAGCTGTC TCCAAGGATT GAGACCCAAG TCATCATGAA      120
AAAGGCCCAA GTACAGTCTT AATGCGATAA ATCCACTAGC TAAGACGTCG AGTGCCAAGA      180
CCAGCCTTCC AGCCGAGGTT TGGACAAAGT CTCAGGTTCC CGTGACTCAG GGTAAAGGTGC      240
TGGGGCTGCC AGAGGACCTG CCCCAGCAAG ATTTTGTGCA AGAGCGAGAC TCCATCAGCC      300
CAGGCAGACG GGAGCAGGTT CTTGGCCAGC GTAGACAGCA GCAAACAGCA GCTCCTCGAG      360

```

(2) INFORMATION FOR SEQ ID NO:945:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:945:

```

GAATTCGGCC TTCATGGCCT AGTGCAGGAG ACGCCCTCAC CGGAGATGGG GACCGAGTCC      60
ACACGGCTCT CACTGCAAAT GCTTTGGGAA AAACAAGACA GTGTACTTTG TGATCATATA      120
AAACAGCAA AATAAATAGT CGTGGGCACA GGGCCAGTGA TTCTGCAGTT AGAGCCGTGT      180
GGACTCGGTC CCCTCTCCGG CTCGAG                                     206

```

(2) INFORMATION FOR SEQ ID NO:946:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:946:

```
GAATTCGGCC TTCATGGCCT AGGTTCCCCG GCGTGGCATG GATGATGACA GAGGCCCTAG      60
ACGTGGTCCT GAGGAAGATA GGTTCCTCTG TCGTGGGGCA GACGATGACC GGCCTTCCTG      120
GCGTAACACA GATGATGACA GGCCTCCAG ACGAATTGCC GATGAAGACA GGGGAAACTG      180
GCGTCATGCG GATGATGACA GACCACCTAG ACGAGGACTG GATGAGGACA GAGGAAGCTG      240
CGGAACAGCT GATGAGGACA AAGGACCTCG AG                                     272
```

(2) INFORMATION FOR SEQ ID NO:947:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:947:

```
GTTTGCTTA GATTTGCTT TGGTTAGGTT GCGTTTTGGG GTTGCCTTT TTTGTTGTC      60
GCTTAAATGC AATTTGGTTG TAAAGATTG ATTCTTTGT GTTCATCTGT TCCGCTTCTC      120
AGCGGTCCAT CTCAGCGTCT CCCTTCAGGA ACCGCTGAGT GTCCTCTCTT AACATCCAAG      180
CCTTTAATG AAATCGTACT GAAATCTGTA TCAGCTAAGA GTCCTCCAAT CCTGGTCCCA      240
TAACTCCAA GTGCCTTTTT GACAGTGACA ACAGACAGTC CCTCGGCACT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:948:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 462 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:948:

```
GAATTAGAAT CTCTAAAGAA ACAGGAGGGA CTTCTTAAAA ATATTCAGGT CTCACATCAG      60
GAATTTTCAA AAATGAAACA ATCTAATAAT GAAGCTAACT TAAGAGAAGA AGTTTGAAG      120
AATTTAGCTA CTGCATATGA CAACTTTGTT GAACTTGTAG CTAATTTGAA GGAAGGCACA      180
AAGTTTACAT ATGAGTTGAC TGAATCCTG GTCAGGTTCC AGAACAAATG CAGTGATATA      240
GTTTTTGAC GGAAGACAGA AAGAGATGAA CTCCTAAAGG ACTTGCAACA AAGCATTGCC      300
AGAGAACCTA GTGCTCCTTC AATTCCTACA CCTGCGTATC AGTCCTCACC AGCAGGAGGA      360
CATGCACCAA CTCCTCCAAC TCCAGCGCCA AGAACCATGC CGCCTACTAA GCCCCAGCCC      420
CCAGCCAGGC CTCCACCACC TGTGCTTCCA GCGTATCTCG AG                                     462
```

(2) INFORMATION FOR SEQ ID NO:949:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 624 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:949:

GAATTCGGCC	TTATGGCCT	ACTCAAAGAG	ACAACAAATA	GCATGGTAGA	ATCAATTAAA	60
CACTGCATTG	TGTTGCTGCA	GATTGCCAAA	AGTACTATTA	ATCCCGTAGA	TGCAATATAT	120
CAACCTAGTC	CTTTGGAACC	TGTGATCAGC	ACAATGCCTT	CCCAGACTGT	GTTACCTCCA	180
GAACCTGTTT	AGTTGTGTAA	GTCAGAGCAG	CGTCCATCTT	CCCTACCAGT	TGGACCTGTG	240
TTGGCTACCT	TGGGACATCA	TCAGACTCCT	ACACCAAATA	GTACAGGCAG	TGGCCATTCA	300
CCACCGAGTA	GCAGTCTCAC	TTCTCCAAGC	CACGTGAACT	TGTCTCCAAA	TACAGTCCCA	360
GAGTTCTCTT	ACTCCAGCAG	TGAAGATGAA	TTTTATGATG	CTGATGAATT	CCATCAAAGT	420
GGCTCATCCC	CAAAGCGCTT	AATAGATTCT	TCTGGATCTG	CCTCAGTCCT	GACACACAGC	480
AGCTCGGGAA	ATAGTCTAAA	ACGCCCAGAT	ACCACAGAAAT	CACCTTAATTC	TTCTTGTCC	540
AATGGAACAA	GTGATGCTGA	CCTGTTTGAT	TCACATGATG	ACAGAGATGA	TGATCGCGAG	600
GCAGGGTCTG	TGGTGAAGCT	CGAG				624

(2) INFORMATION FOR SEQ ID NO:950:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 371 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:950:

GATTCTAGAC	CTGCCTCGAG	CACGCTTGGA	GAAGCCCCGT	CTCTACTAAA	AATACAAAAT	60
TGGCCGGGCA	TGGTGGCGCA	TGCCTGTGGT	CCCGGCTACT	CTGGAGGCTG	AGGCGGGAGA	120
ATCACTTGAG	CCCAGGAGGT	GGAGTTGAGG	TGAGCCGAGA	TCGTGCCATT	GCACTCCGGC	180
CTGGGTGACA	GAGTGCAACT	CCGTCTCAAA	AAAAAAAAAA	AAGCATTAC	GTCAATGTCA	240
AGAGAACCTG	CTACTAATGC	TTTCTTTGAT	AGGCAGTATG	ATAGGTTGGA	AAGAATATAA	300
ACTGGGATCA	AGCTTGGGTT	CCACTTACCA	GCTGTAGTAT	GTTGAGCAAA	TTATTTAATC	360
TAACACTCGA	G					371

(2) INFORMATION FOR SEQ ID NO:951:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 283 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:951:

GCGATTGAAT	TCTAGGGTTT	TTTTTTTTTT	GGGATCCTGG	GTAAATTTT	ATCCAAAAAA	60
CGGGATTTTT	TTTTTTTTTA	AAAAGGAAAT	TTGAATTCAA	AATTTTGGGC	AGCCCCGGCT	120
TTTTTTTTTT	TTTTTTTTTT	TTTTTTTTTT	TTTTTTTTTT	TTGGTGGGTT	CTGAGTCTTC	180
ACTTTATTAC	TATGTCACCA	GAAGTCACCA	CCTTCACTTG	GTTCAACCACA	GATGGATGGA	240
TGTCATAAAG	GAGGGTGCCA	CGGGGCCACT	GGATTCATC	GAG		283

(2) INFORMATION FOR SEQ ID NO:952:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 285 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:952:

```

GCTTGGCAGA TGCTAACTTC ATGGAAGATG GTAATAGGAA CAGATACTGC TCTCTGCCCC      60
TGCTTCTTGG ATTCTTCAGC TCCTACCGCT GATTTCGGATT ATCCCTTTT GACCTCTTGG      120
GGGATCCAGA CTGCTGCCAG GAGGCTGAGT AGATACCTCA GTTATCTGTA TGTATTCTTCT      180
GAGAGGCTTT GCGGATCCT CTCACCTTGG CATCCTGTGG CATCCCTAGG GTCTGGTGGT      240
AGCAGTAATA GCAACAATGA TATCTTACAT CTGGAACAAC TCGAG                          285

```

(2) INFORMATION FOR SEQ ID NO:953:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 614 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:953:

```

GAATTCGGCC TTCATGGCCT AATTCTAGAC CTGCCTGTCT TGAGAGGAAC CTTCCTGTG      60
CTGGCTCCTG TTGTTATCTG TACCTAAGTT ACTCAGTTCT GAGTGCATGT CTGGTAAATG      120
CTGGCCATTT CTTTGAAGTT CTGACTCAGA ATCGGCCTCC ATTAGAGAAC TCAGTTCTCC      180
AAACCCAGTC ATGATCTGCC TTAAAAATTGA CCGAAGAGCC ACTGATGATG GCTCAACAAG      240
CTCATTCTCA GAAATCCTAC GAAGAGGAAC TGTATGGTA CTAACATAGG TTCGAATACC      300
TGACCGCTCT AAACGAGAAA TGGTTCGGCG AAAGCCCCCA CTATTGCTTT CAATAGTGAC      360
TGTATTTTCT GCTAGCCCTA CTCTGGATCG AGTTCATTT GCAATACTAT CCCGATCTCT      420
ATTTTCTCCA GGACGGATCC TTCTCACTTG AAGGTCCAGT GTGATTGTTG GATGTCGTCG      480
TACAGCAGTT GAGGATCTGC TGGATTCTTC TCCTTCTTCT ACTGTTATTC TTGACACAAG      540
CCTTGAATTA GAGAATGGGG TATATGCAGT ACCTCTGCGT TCTCGTTCTC TATCTTGCTC      600
TAAAAAGACT CGAG                          614

```

(2) INFORMATION FOR SEQ ID NO:954:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 304 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:954:

```

GAATTCGGCC TTCATGGCCT ACAAGGATTT CAGGATGTTT TTCCTCTGGA CTGCTCTGTT      60
CTGGGGTGGA GTCATGTTTT ACTTGCTGCT CAAGAGATCC GGGAGAGAAA TCACTTGGA      120
GGACTTTGTC AATAACTATC TTTCAAAAGG AGTAGTAGAC AGATTGGAAG TCGTCAACAA      180
GCGTTTTGTT CGAGTGACCT TTACACCAGG AAAAATCCTT GTTGATGGGC AATACGTTTG      240
GTTTAATATT GGCAGTGTGG ACACCTTTGA ACGGAATCTG GAAACTTTAC AGCAGGCGCT      300
CGAG                                          304

```

(2) INFORMATION FOR SEQ ID NO:955:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:955:

```

GAATTCGGCC TTCATGGCCT AGTAGCTATT AATCTGTGGC TATGAAATGA TCAGAAATGC      60
TAAGTGAGAT CAATATTTGT TTGAAAAAA AATCTTGGGA AACACCCAA GGGTTTTCCG      120
TGTTGTTGTT TTTCTTTTC TATTTTGTN NACTTAGTCC TTAGCTAGT GGATTAATT      180
TTGTTGTGCC TGCTTCATTT TGCAATAACA ATGCAGTAGA ATTTAAACT TGGACGCTCG      240
AG                                                                                   242

```

(2) INFORMATION FOR SEQ ID NO:956:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 293 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:956:

```

GCTGCGCTGT ACTTCAGATA CTTTTTCGA GGAACATTG TGATTGTGG CATAAAGTAA      60
CTGTCTAAAG GAAATCTTCT GAGAGGATCT GGTCAATTTA TGAAAGGGG AATTAAGGGG      120
AAATGGAAGC AGATCTTTTA AAGAAGGAGC ATTTGAAATT AGCCAGGAA TCATGTCGGG      180
CGAGTCCTGC TCTTTGTAC CTGGGCATAA TAGTCAGCCA CACAGAGCTA GAGTTAGTTC      240
AAGAATTGTC TTTCTGATC GTGCTATATT TTTGGAAACA CGCCGCTACT GAG              293

```

(2) INFORMATION FOR SEQ ID NO:957:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:957:

```

GCAAAGAATG GTAACGTGCT TATCATGGGA GTGTTTGAG AAACITAGCC AAAGCTTCAG      60
CAGAAAAATC CCCGAGAAAG ACCAGAGAGT TCTTACCAC AACAAATGTC CTGCTCATCC      120
CTCTCATCAA ACAAGGCCAT TTGCAAGAG TTTGATGGG AAATCACTAG GCATCCACCC      180
TACAGTCCTG GTTTGGCACC TTCTGACTTT TTGTTTCCTA ATCTTAAAAA AATTTTTCAG      240
GGCAACTCTC GAG                                                                                   253

```

(2) INFORMATION FOR SEQ ID NO:958:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 466 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:958:

```

GAATTCGGCC TTCATGGCCT ACAACATCAG CTCCTGTCTG GTTCTCCAGC TGCACGACCT      60
CAAACTACAA CCTCAGCTCT TCCCGAGTC TTCTGCTGCA TGACCCTCAA TCTAGAACAT      120
AAGCTCCTCT CTGGGTGTCC ACCTGTAGGG ACCTCAAAT AGAACGTCAG CTCCTCCCAG      180
AGTCTTCAGC TGCATGACCC TCAATCTTTA ACATCAGCTC CTCTCCAGGT CTGCAGCTCC      240
ATGACCCTAA AAATACATGA GCAGCTCCTC CCTGAATCTT CAGCTGTACG ACCCTCAAAC      300
TACAACATCA GCTCCTGTCT GCACCTCCAG CTGCAGGGCC CTCAAACTAG AATATCAGCT      360
CCTCCCCGAG TCTTCAGCTG CACGACCCTC AAACCTAGAAC ATCAGCTCCT GTACAGATTT      420
CCAACGTAG GGCCTCAA CTAGAACATC AGCTCCTCCC CTCGAG                          466

```

(2) INFORMATION FOR SEQ ID NO:959:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 137 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:959:

```

GGAGCATGTC CTGTTATTTA TTAACTTTT CCATTTTCAT TTTTATTG GGTAAAGATAA      60
TTGCTTATGA TAAGCCTTGG GTGTGGAGAG CCGGTGCATA CAGAGTGGCG AGGCAAGCTT      120
CAATCTGCAG TCTCGAG                                     137

```

(2) INFORMATION FOR SEQ ID NO:960:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 317 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:960:

```

GAATTCGGCC TTCATGGCCT AGAGCCGCGG CTCATGCGCG GTGCACAGAG GCTTGTTC      60
CATCTGTAAC AACAGGAGGA GGCCGAGCCT CGTGATGAGG AATAGCAAGG AGAGAATTCA      120
GCTCCAGTTC AAAAGCCTAC AAAATCTGAG ACTGTCAATTG CTTTATAAG GATTCCAGCT      180
TTCCCTCCTG GCCAGAAATG TTCAGCCTGG ACTCATTGAG AAAAGATCGG GCCCAGCACA      240
GGCAGCGTCA GTGCAAACTT CCCCCACCCC GCCTTCCACC CATGTGTGTC AACCTACCC      300
CAGAAGGAAC CCTCGAG                                     317

```

(2) INFORMATION FOR SEQ ID NO:961:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:961:

```

GAATTCGGGC TTCATGGCCT ACTCTGCTCA ACCTGCACAT CACCCACCAC AGTCACCAGC      60
ACAAATTCAG ATGCAACTAC AGCACGAATT ACAACAGCAA GCCGCATTCT TTCAGCCTCA      120

```

GTTTCTAAAC	CCAGCCTTTT	TGCCTCATTT	TCCTATGGCC	CCAGAAGCAC	TGCTGCAGTT	180
TCAGCAGCCT	CAGTTTCTCT	TTCCATTTTA	TATACCTGGG	ACGGAGTTCA	GCTTGGGGCC	240
AGATTTGGGC	TTGCCAGGCT	CTGCCACATT	TGGGATGCCT	GGCATGACAG	GAATGGCTGG	300
CTCCTTGCTT	GAAGACCTAA	AGCAGCAGAT	TCAAACCCAA	CATCAGTTG	GTCAAACCTCA	360
ACTCCAGATA	CTACAGCAAC	AAGCACAAAC	ATACCAAGCC	ACACAGCCCC	AGCTGCAGCC	420
TCAAAAACAA	CAGCAGCAGC	CACCACCTCC	ACAGCAACAA	CAAGCTCGAG		470

(2) INFORMATION FOR SEQ ID NO:962:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 603 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:962:

GAATTCGGCC	TTCATGGCCT	AGGAGAANGA	CGTGCTGGTG	AACGTGAACC	TGGTGGATAA	60
GGAGCGGGCA	GANAAAAATG	TGGAGCTGCG	GAAGAAGAAG	CCTGACTACC	TGCCCTATGC	120
CGAGGACGAG	AGCGTGGACG	ACCTGGCGCA	GCAAAAACCT	CGCTCTATCC	TGTCCAAGTA	180
TGACGAAAAA	CTTGAAGGGG	AGCGGCCACA	TTCTTCCGC	TTGGAGCAGG	GCGGCACGGC	240
TGATGGCCTG	CGGAGCGGG	AGCTGGAGGA	GATCCGGGCC	AAGCTGCGGC	TGCAGGCTCA	300
GTCCCTGAGC	ACAGTGGGGC	CCCGGCTGGC	CTCCGAATAC	CTCACGCCTG	AGGAGATGTT	360
GACCTTTAAA	AAGACCAAGC	GGAGGGTGAA	GAAAAATCCG	AAGAAGGAGA	AGGAGGTAGT	420
AGTGCGGGCA	GATGACTTGC	TGCCTCTCGG	GGACCAGACT	CAGGATGGGG	ACTTTGGTTC	480
CAGACTGCGG	GGACGGGGTC	GCCGCCGAGT	GTCCGAAGTG	GAGGAGGAGA	AGGAGCCTGT	540
GCCTCAGCCC	CTGCCGTCCG	ACGACACCCG	AGTGGAGAAC	ATGGACATCA	GCACACTCTC	600
GAG						603

(2) INFORMATION FOR SEQ ID NO:963:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 415 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:963:

GAATTCGGCC	TTCATGGCCT	ACAACAGCGT	TAGGTTTTTT	TTTNGTTNG	TNGTTNGTT	60
TNGTTTTTTT	CCAACCCTCT	TTCCGATGGA	CGGGGAAAGA	GAGAAAGAAA	AANCGAGGGA	120
AAATCNACAA	AATGTGCGAT	GCAAAGAGTC	GATTTTCGCG	GGGTTTGTCA	ACTTCGCCAC	180
TGCCGCACGC	GAATCGACGT	CGTCACGTGA	CGGTCTGCCT	CCGCCCTTAT	TAACCTCTCAG	240
CCCAGCGGCG	GTTTCCAGGA	CCTCAGACTT	TTTGCCGAGG	CGGCAGTCCC	TAGACGAAGC	300
GAAGGAGGCG	GCGCCTGCCC	CGCCCAAGAG	AGCTGCCGCG	CGCGGGTGT	ATAGCTCCAC	360
CCCATCTGCA	AAGGAAGGGG	GAGCGGAAAG	AGCGGGATCT	AGCGGGGAAC	TCGAG	415

(2) INFORMATION FOR SEQ ID NO:964:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:964:

GAATTCGGCC	TTCATGGCCT	AGCGGGTCTT	CAGACAAGTG	GAAAAGGTGA	GAGAGGAGAT	60
CAGGGCGCAG	AGCCCCGTGG	AGGCTGAGTT	TCCATATGGG	CAACTGAGCA	CATCCTGCCA	120
CTCCACCTC	GTGCCTCAGA	ATNGACACCA	GGCTACTCAT	CTGGAGGTGA	CCAAGCAGCC	180
AACCAATCGG	GTCCCCTGGA	GGTCTCAAA	TGCCTCCCA	TACCTTGTTG	CAGACCTCGA	240
G						241

(2) INFORMATION FOR SEQ ID NO:965:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 485 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:965:

GAATTAATAG	CCTGCAGGTT	AATTACTCCC	TGAAGGGTAT	TGTGGAAAAG	TATAACAAGA	60
TCAAGATCTC	TCCCAAATG	CCAGTATGCA	AAGGACACTT	GGGGCAGCCT	CTCAACATTT	120
TCTGCCTGAC	TGATATGCAG	CTGATTGTG	GGATCTGTGC	TACTCGTGGG	GAGCACACCA	180
AACATGTCTT	CTGTTCTATT	GAAGATGCCT	ATGCTCAGGA	AAGGGATGCC	TTTGAGTCCC	240
TCTTCCAGAG	CTTTGAGACC	TGGCGTCGGG	GAGATGCTCT	TTCTCGCTTG	GATACCTTGG	300
AACTAGTAA	GAGGAAATCC	CTACAGTTAC	TGACTAAAGA	TTCAGATAAA	GTGAAGGAAT	360
TTTTTGAGAA	GTTACAACAC	ACACTGGATC	AAAAGAAGAA	TGAAATCTGT	TCTGACTTTG	420
AGACCATGAA	ACTTGCTGTT	ATGCAAGCAT	ATGACCCAGA	GATCAACAAA	CTCAACACGC	480
TCGAG						485

(2) INFORMATION FOR SEQ ID NO:966:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 330 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:966:

GAATTCGGCC	TTCATGGCCT	AACGGCTCCC	TCACTTGTA	ATTAAAGTCA	GACACTGCCG	60
TAAGGTTCCT	CTGTTCCCTG	CTTTGTGGAG	AAAGCTTTCA	GCAGCAATAT	CTGGGATCAC	120
TGGTGATTA	AATGTCAGGC	CTCGCATCAT	TATTCTGCCC	TGAGCTGATG	GTAAACCGGG	180
CACCCAGCCT	TTTAGCTTTC	ATCCAGCAGC	AGGGAACCTG	CCTTCAGATG	TGACACGTAC	240
AAGTCAAAA	AGCTCAGAGT	CAGCTCCAAC	GTCTATTGGA	TCCCACTCTA	TGCGCTTTAA	300
AAAGGAAAAG	AAAATCGAAA	CGAACTCGAG				330

(2) INFORMATION FOR SEQ ID NO:967:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 344 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:967:

GAATTCGGCC	TTCATGGCCT	AGGGTCGCAG	ACTCAAATGC	CCACAGGGGC	CAGGTIAGGT	60
TAGCGGCTGA	AGCAGTCTGG	GGAGAGGCAA	AAAGCAATGG	CAGGGAGGTG	GGACAGAGGA	120
ATGTGGGCCC	CAAACATATG	GGGCAGCTGC	TACTCAGTGC	CAGCTGTTCG	TCGCCATGGG	180
GGGAAGCGGG	ACCAGAGCCG	CCGGGTCTTC	GGCTTTTTC	AGAGGACGCA	TAACTCCGGA	240
TTGTTATTG	AACTGTCCTG	ACTTTGGTAA	GACTCTGTGA	CGGTGACAGT	GAAGGAGGCC	300
GACTCATCGT	CAATTCACA	CAAGTACTCG	CCGGAGTCCT	CGAG		344

(2) INFORMATION FOR SEQ ID NO:968:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 531 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:968:

GAATTCGGCC	TTCATGGCCT	AGGATGCAGC	CGAAAAGGAT	CGCAAGCTTC	AGGAGAAAGA	60
GAAGCAAATC	GAAGAGCTGA	AGAGGAAACT	GGAACAAGAG	CAGAAGCTCG	TGGAAGTGCT	120
GAAAATGCAA	CTTGAGGTG	AAAAACGAGG	GCAGCAGCAG	CGGCCCTTGG	AAGCCAGGCC	180
CAGTGCCCCA	GGTCATTCTG	TCAAGTCAGA	TCAGAAGCAC	GGCAGCCTTG	GCTCCTCCAT	240
CAAAGATGAG	GCCTCACTCC	CTGACTGCTC	CAGCTCCAGG	CAGCCCATCC	CAGTAGCCAG	300
CCACGCTGTA	GGCCAGCCCG	TCTCTACAGG	TGGCCAGACC	CTTGTTGCCA	AAAAGGCTGT	360
AGTTATCAAG	CAAGAGGTCC	CTGTGGGCCA	GGCAGAGCAG	CAGAGTGTG	TCTCGCAGTT	420
TTATGTGAGT	TCCCAGGGAC	AGCCACCGCC	TGCTGTTGTT	GCTCAGCCCC	AGGCTTTACT	480
GACCAAGCAG	ACTGCTCAGC	TGCTGTCTCC	AGTGTCATC	CAGGGCTCGA	G	531

(2) INFORMATION FOR SEQ ID NO:969:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:969:

GTGCCTCGAG	AAACTGCCTA	TTCAGAAACA	CAGAAACACC	GAGACCTCAA	AATCCCCTGA	60
GAAGGACGTT	CCCATGGTAG	AAAAGAAGAG	CAAGAAACCC	AAGAAGAAAG	AGAAAAACA	120
CAAAGAGAAA	GAGAGAGACA	AGGAGAAGAA	GAAGGAGAAG	GAGAAGAAGG	CTGAGGACCT	180
GGACTTCTGG	CTGTCTACCA	CCCCACCGCC	TGCCCCCGCC	CCCGCCCCCG	CCCCGTTCC	240
ATCCACGGGG	GAGCTCAGTG	TGAACACTGT	CACTACCCCG	AAGGACGAGT	GTGAGGACGC	300
CAAGACGGAG	GCGCAGGGCG	AGGAGGACGA	TGCCGAGGGG	CAAGACCAGG	ACAAGAAATC	360
TCCAAGCCT	AAGAACAAGA	AGCTCGAG				388

(2) INFORMATION FOR SEQ ID NO:970:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 365 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:970:

```

GAATTCGGCC TTCATGGCCT AGCTTACACT GGGCCAAGTG CTTGCCAAGG ATTCTCATGT      60
GACATTTCTT TCAGTCCTGC CGAGGACTTT ATGAGGGAAG CACCCTGTTT TACAGAGGGA      120
AGGGGGCCTA TGGGGTCTAC AGCAGTGAGA GCCTAGAGTT CAGTCTGCGT CTCTCTGATT      180
CCAAAGCCTG TGATTGTGAC TTCCATACTC TCCCTAAGAC ACATTCATAC ATTCAACTGA      240
ATATTTATG AGCACCTACT GTGTGCTAGG GATAGAGCAG TAAATGAATC AGGCAAAAAT      300
TATTTACATT CCACTGGGGC TGACAAACCC AAACAAGGAA GAGGTGTAGT GCTTCGGGTC      360
TCGAG
365

```

(2) INFORMATION FOR SEQ ID NO:971:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:971:

```

GCAAAAGTAA TATGATTGTG TTAAATACT CAGTCAACAG GTATTTCTG AAAATATTTT      60
CCATAGAAAG TAGAATATGG TTCTCCCGAA TAAAACTGA TCCATTTTAC CTTTTTCTTT      120
CCCTTTTGTG TNNGGTATTT TTTTTCCTT TTTCTTTNN GCTTTTTTCC TTTAACTTTC      180
CAGCCAAAGG CTTCTATGAT CTTGATGCTT TAAATGAAGC TGCTTGGACA AGTGCCACAC      240
GCCAGTTGGT TCCCTGTAAT GTTTGTGGGC GTACCTTCCT GCCAGACAGA CTGATTGTTT      300
ACCAACGATC TTGTAAACCC AAAGCTCTCG AG
332

```

(2) INFORMATION FOR SEQ ID NO:972:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:972:

```

GCGCCCTCAC CCCTCCAATC CCCCCTCTGA CCCCCTCTTC CTCACATGGG GTCGGGGGCC      60
TGGGAGTTCA TTCTGGACCA GCCACCTAT CTCCATTTC TTTTATACAG ACTTTGAGAC      120
TTGCCATCAG CACAGCACAC AGCAGCACCC TTCCCTGAG GCCGTGGGG AGGGGACAAG      180
TGTCAGCAGG ATTGGCGTGT GGGAAAGCTC TTGAGCTGGG CACTGGCCCC CCGGACGAGG      240
TGGCTGTGTG TTCACACACA CACACACCTC GAG
273

```

(2) INFORMATION FOR SEQ ID NO:973:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:973:

GAATTCGGCC TTCATGGCCT ACTCTGTCTC AAAAAAAAAAT AGTAAGTTGT GTAAAGAAAA	60
ATATTAATTA TATAATATGG CAGTTCCTAT GAGAGTGTGG CAAAAATCAA GAGGGCTTGG	120
AAGTTTTTTC TTGCTCTTG CAACTGGCTG GATGCAGTTC ATATATTTT CAACCACTAG	180
GTGGCACCCC AACCTAATT TTTGCAGTTG TAACCTGGTG GCAGAAGGGG CAGGACTGAT	240
GGCTTGGGCA AGACTGTTAT GCCAAGTTCT CGAG	274

(2) INFORMATION FOR SEQ ID NO:974:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 145 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:974:

GAATTCGGCC TTCATGGCCT AGTGAGATAG TACCAGATT AGAATATAAT TTTATCTTTC	60
TTTAGCAACA AGCCCTAACA ATATCCAAAC TAAATAAAAT CATTACATGA ATTTACTTTT	120
TACAATCATT CTCCTAAGGC TCGAG	145

(2) INFORMATION FOR SEQ ID NO:975:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 242 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:975:

GAATTCGGCC TTCATGGCCT AGGAAATAAC AGTTATTTCA TCATAAAACA GTCCCTTCAA	60
ACACACAATT GTTCTGCTGA AGAGTTGTCA TCAACAATCC AATGCTCACC TATTCAGTTG	120
CTCTGTGGTC AGTGTGGCTG CATAGCAGTG GATTCCATGA AAGGAGTCAT TTTAGTGATG	180
AGCTGCCAGT CCATTCCCAG GCCAGGCTGT CGCTGGCCAT CCATTCAGTC GATCATCTCG	240
AG	242

(2) INFORMATION FOR SEQ ID NO:976:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 116 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:976:

CATGTGCACA CTCGCACATG CACATATGGG CACGTGGGAA GACGGGAGAA GTACTGTCAA	60
AGTATAAGGA ACTGCAGAGG TTGGGATTTA CTGGAAGGGA AGGGAGCACA CTCGAG	116

(2) INFORMATION FOR SEQ ID NO:977:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:977:

```
GAATTCGGCC TTCATGGCCT AGCATGGCAA CAGATATGTG GAGCATTGGA GTGTTAA'CAT      60
ATGTCATGCT TACAGGAATA TCACCTTTCT TAGGCAATGA TAAACAAGAA ACATTCTTAA      120
ACATCTCACA GATGAATTTA AGTTATTCTG AGGAAGAATT TGATGTTTTG TCTGAGTCGG      180
CTGTTGATTT CATCAGGACA CTTTGTAGTTA AGAAACCTGA AGATCGAGCC ACTGCTGAAG      240
AATGTCTAAA GCACCCCTGG TTGACACAGA GCAGTATTCA AGAGCCTTCT TTCAGGATGG      300
AAAAGGCACT AGAAGAAGCA AATGCCCTCC AAGAAGGTCA TTCTGTGCCT GAAATTAATT      360
CGGATACCGA CAAATCAGAA ACCGAGGAAT CCATTGTAAC CGAAGAGTTA ATTGTAGTTA      420
CTTCATATAC TCTAGGACAA TGCAGACAGT CAGAACTCGA G                                     461
```

(2) INFORMATION FOR SEQ ID NO:978:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 108 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:978:

```
GAATTCGGCC AAAGAGGCCT AATGATGATG AATAAGTTGG TTCTAGCGCA GTTTTTTTTT      60
TTTCTTGTCT ATAAAGCATT TAACCCCTCT GTACACAAC TACTCGAG                                     108
```

(2) INFORMATION FOR SEQ ID NO:979:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 505 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:979:

```
GATGGCGTCG GGCAGCGGGA CAAAAA'ACTT GGACTTTCGC CGAAAGTGGG ACAAAGATGA      60
ATATGAGAAA CTC'CCCGAGA AGAGGCTCAC GGAAGAGAGA GAAAAGAAAG ATGGAAAACC      120
AGTGCAGCCT GTCAAGCGAG AGCTTTTACG GCATAGGGAC TACAAGGTGG ACTTGGATC      180
CAAGCTTGGG AAGACAATTG TCATTACCAA GACAACCCCT CAATCTGAGA TGGGAGGATA      240
TTACTGCAAT GTCTGTGACT GTGTGGTGAA GGACTCCATC AACTTTCTGG ATCACATTAA      300
TGGAAAGAAA CATCAGAGAA ACCTGGGCAT GTCTATGCGT GTGGAACGTT CCACCCCTGA      360
TCAGGTGAAG AAACGTTTGT AGGTCAACAA GAAGAAGATG GAAGAGAAGC AGAAGGATTA      420
TGATTTTGAG GAAAGGATGA AGGAGCTCAG AGAAGAGGAG GAAAAGGCCA AAGCGTACAA      480
GAAAGAGAAA CAGAAGGAGC TCGAG                                     505
```

(2) INFORMATION FOR SEQ ID NO:980:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 314 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:980:

```
CGAGGGACAT GAGGCTGAGC TGGTTCCAGG TCCTGACAGT ACTGTCCATC TGCCTGAGCG      60
CCGTGGCCAC GGCCACGGGG GCCGAGGGCA AAAGGAAGCT GCAGATCGGG GTCAAGAAGC      120
GGGTGGACCA CTGTCCCATC AAATCGCGCA AAGGGGATNT CCTGCACATG CACTACACGG      180
GGAAGCTGGA AGATGGGACA GAGTTTGACA GCAGCCTGCC CCAGAACCAG CCCTTTGTCT      240
TCTCCCTTGG CACAGGCCAG GTCATCAAGG GCTGGGACCA GGGGCTGCTG GGGATGTGTG      300
AGGGGGACCT CGAG                                     314
```

(2) INFORMATION FOR SEQ ID NO:981:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 379 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:981:

```
GAATTCGGGC TTCATGGGNT ACTCATTGCT ACATTGCTAG TTGACCCGCA GTTATATTTC      60
CTTTTTTCT TTTTAATAAA AGGCAAGAGA AACAAATCCGT TTTTGCCTTT TCCTACCACA      120
TCTTTGACTT TTCTGATTCC TGCAAGTTTA AGTTAAAAAC ATCCTACCTT CAAGCTACAA      180
AATGCAGCAC ATCCCAGGAC ATCCCTCACC TGCTTTGCTT GTTTATTAGA CACAAGTGGC      240
TTTGTTCAGA AAGTTACTGG GAACCGCTAA GGATAGTCAA GGTGGAGAAC ACAGGGTGGG      300
GTCTCAGAGT CTGAGGCCTT GGTTCAGGTT CCTGATAACA TTAATATAG AAAATACACA      360
GCACAAGGCC AAATCTGAG                                     379
```

(2) INFORMATION FOR SEQ ID NO:982:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:982:

```
GAATTCGGCC TTCATGGCCT AGAAGATGGT AAGGTTGAA TCTTTCGGGT GATGGGAGTT      60
AAGTGTGAAC AGGAAGTGGG ATTTAAGGGC CACACTTCAG GGGTATCCCA GGTCTGCTTT      120
CTCCAGAAAT CCTATTTGCT GCTTACTGGA GGAATGATG GGAAGATCAC GTTGTGGGAT      180
GCAACAGTG AAGTTGAGAA AAAACAGAAG AGTCCACAA AACGTACCA CAGGAAGAAA      240
CCTAAAAGAG GAACTTGCAC CAAGCAGGT GGAATACTA ACGCTTCAGT AACAGATGAG      300
GAAGAACATG GCAACATTTT ACCAAAGCTA AATATTGAAC ATGGAGAAAA AGTGAACTCG      360
AG                                     362
```

(2) INFORMATION FOR SEQ ID NO:983:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 574 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:983:

GAATTCGGCC	TTCATGGCCT	AGGCCACTGA	TATTTTCTA	AGTTAGCAAG	GCTCACTTGC	60
TTGCTTTCTT	GCCTCCCTTG	CCTCCATCCC	TCTCCCTTCC	TACCTTCTCT	ATTACCTAT	120
TTCTCTCCCT	CCCTCTCTTC	TCCTCTCTTT	TTTTTTCCCC	CGCATATGCA	GCTTTTGTAT	180
TGTACTTGAT	TTTATAGAGA	CTGCACAGTT	CCAGCAAGAT	TGGGAGTCAG	GCATGGAGCA	240
GGCATCTCAG	GCTACCAGAA	AGAATTGGTC	ACCTAGACTT	TCAGTCAGGC	ATCCTCGTTT	300
GCATTGTCCT	GTAAGTCAAT	TAGTTGATAA	ATAGTTCCCC	CTTCATCCCT	TAAGTTTGT	360
TTTGTTTTT	GTTTTTAATA	TAGGTAAGTG	GGACTCTACC	TAAAATTTTG	CATCATACTT	420
ATGGGTAATA	TCTTTTTCAT	ATATTATTTA	TCAAAGTATG	AAGTTGAGTA	TTTGCTTGT	480
ACCATTTCAA	TTCTGCATTA	TAGTAGTTCA	TTGTATAACT	GAAAGAAATG	ATTCTTCAT	540
AAGTGACATT	AAATATGAAC	ATTCATCTCT	CGAG			574

(2) INFORMATION FOR SEQ ID NO:984:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 274 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:984:

GAATTCGGCC	TTCATGGCCT	ACGATTGAAT	TCTAGACCTG	CCCCCTCCCT	CCATGCCTCA	60
TCCCCCGCCC	CCTCCAGTCA	TGCCGCAGCA	GGTTAATTAT	CAGTACCCTC	CGGGCTATTC	120
TCACCACAAC	TTCCCACTC	CCAGTTTAA	TAGTTTCCAG	AACAACCCTA	GTTCTTTCTT	180
GCCCACTGCT	AATAACAGCA	GTAGTCTCA	TTTCAGACAT	CTCCCTCCAT	ACCCACTCCC	240
AAAGGCTCCC	AGTGAGAGAA	AGTCCCCACT	CGAG			274

(2) INFORMATION FOR SEQ ID NO:985:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 366 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:985:

GAATTCGGCC	TTCATGGCCT	AGATAAGGAG	ACTTCAGAAG	AGAAGCCGCC	AGCTGAGGGA	60
AGTGAGGACC	CTAAGAAGCC	ACCCCGCCCT	CAGGAGGGAA	CAAGATCTAG	CCAGCGAGAT	120
CAGATACTCT	ATCTCTTTGG	GAGAACTGGC	CGAGAAAAG	AGGAATGGTT	TAGGAGATTT	180
ATTCTGGCAT	CTAAGCTAAA	GTCGAAATC	AAGAAGTCAT	CGGGTGTCTC	TGGAGGTAAA	240
CCAGGGCTTT	TGCCTGCACA	CAGCAGACAC	AACAGTCCGT	CCGGGCACCT	GACCCACAGC	300
CGCAGCAGCA	GCAAAGGCAG	TGTGGAGGAG	ATCATGTAC	AGCCAAAGCA	GAGGGAGCTA	360
CTCGAG						366

(2) INFORMATION FOR SEQ ID NO:986:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 451 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:986:

```

GAATTCGGCC TTCATGGCCT ACTCTCTTCC AACCAAAAGT CTTAATATGG GAATATCCCT      60
CACCACGATC CTAATACTGT CAGTAGCTGT CCTGCTGTCC ACAGCAGCCC CTCCGAGCTG      120
CCGTGAGTGT TATCAGTCTT TGCACTACAG AGGGGAGATG CAACAATACT TTACTTACCA      180
TACTCATATA GAAAGATCCT GTTATGGAAA CTTAATCGAG GAATGTGTTG AATCAGGAAA      240
GAGTTATTAT AAAGTAAAGA ATCTAGGAGT ATGTGGCAGT CGTAATGGGG CTATTTGCCC      300
CAGAGGGAAG CAGTGGCTTT GCTTCACCAA AATTGGACAA TGGGGAGTAA ACACTCAGGT      360
GCTTGAGGAC ATAAAGAGAG AACAGATTAT AGCCAAAGCC AAAGCCTCAA AACCAACAAC      420
TCCCCCTGAA AATCGCCCGC AGCATCTCGA G                                     451

```

(2) INFORMATION FOR SEQ ID NO:987:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:987:

```

GAATTCGGCC TTCATGGCCT AGAGAAACTG AGCAAAAATA GCTGCCAAGA GAAGAGGGAA      60
CGAGTGCTCG GGGCGGGTTG GAGGCAGATA ACGAGAAGGC AAGAAAATTC TTTGTCTTTG      120
GCTCCTGCTG TCAGCTCAGA GGGGTCTCTT TGAGATGAAA AAGAAAAGTC CCCAGCCTTG      180
GGGAAGGAAA GGAGAGGGTG CCCACGCAG ATATGAAGCA AAGCCATTGG CAAGATATTC      240
TCTCTAAGGA GAGCAGCGGT CTTGCCAAAG GCATCTTCTA TTGTGTATTG CCGTCATAAA      300
CCCTACCCTT CCATGTAGAT AGCCAGGACT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:988:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 509 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:988:

```

GAATTCGGCC TTCATGGCCT AAGAGAAACA AAAATGATTT TGCTTTCCAA GCTTGGTTTG      60
TGCGTCTCC CTCGAGAGC CCTTCTCGTT TCTTTTTTAA ACTAATCACC ATATTGTAAA      120
TTTCAGGGTT TTTTTTTTGT TTTAAGCTGA CTCTTGCTC TAATTTTGGG AAAAAAGAAA      180
TGTAAGGGT CAATCCAAC GTATGTGGTT ATCTGTGAAA GTTGCACAGC GTGGCTTTTC      240
CTAAACTGGT GTTTTCCCC CGCATTTGGT GGATTTTAT TATTATTCAA AAACAAAATG      300
AAAAGGTTAT TACTTTTTT TTTCTGAAA TGCTGACAAT ATGTGATATC TTAATATCTG      360
TAATTCTTAG TGAAGTTAT GGTATAGTAT AGGTGAAGCT GTAGTGTTA TATCAATAGA      420
TGTAATTCA AATGAGCAAT CTAATAATTA TTTACTATTC AATTATGTTA ATTTTCTTCT      480
CTTTGTCTCC CATTGTATCT GCACTCGAG                                     509

```


(2) INFORMATION FOR SEQ ID NO:989:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 409 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:989:

```

GAATTCGGCC TTCATGGCCT AGGCTTGTGG GCAGGGCCCC TGCAGGTCAT GGAGCCGGTA    60
GCATCTCAGA GCTGGACAGA GGAGGTAGGC TGGGAGCAGG CCCGGTTGGG GACCACTGGC    120
CCCTGCACAG GAGCCAGAGG GCCTGGGCAG CTGTCTGTCC AGAAAGCATG CAAGACCCCG    180
TGCCACCCGG GCACACAGGG CTGTCTGTGC TAGAAAGAGA TCTCCTGGGG TCACGGGCAG    240
GCAAAGCTGA TTGATTTTGG CCGTGAAGTT TGACCTTGTG ATGGAACCCG AGCTCCCAGG    300
GAGTGAGACA AACTGCCTCC CCGTGTCACT GGCCAATAAA CCTGACTTGG TTTTACAGCC    360
CCGAGAAATT GCTCACTAAT AGCCAGACAG ATGCTCCCCC TGCCTCGAG    409

```

(2) INFORMATION FOR SEQ ID NO:990:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 210 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:990:

```

GAATTCGGCC TCATGGCCTA CCCAAATCTG AAGTCTTTGG ATATGTTACT GCTGAAGTTT    60
CTATCACTTC TCACTCCTGG TTCCTTGTTT CCCTGTATGC TTTTTTTTTT TTTCATGAG    120
TTCACTTTTT TAAATTATAG TTCTCAAGG CCTAGGATGC AGGTGTGTTT TTCCATAAAG    180
GGCTATTTTG CCTCTGCCGA GGTCTCGAG    210

```

(2) INFORMATION FOR SEQ ID NO:991:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 447 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:991:

```

GAATTCGGCC TTCATGGCCT AGTAGATAGT ACAAATTC AAGATATCA AAGTGTGTTA    60
AGTTTACCTT TCCACCACT TTCTCATTTT TGTCTCCCC AGTTCTTTT GCATTATTCC    120
ACGTATATTC TGTGCATATA TACATTCATA TACATTTATC TGTATGTGC AGCTTCTTTT    180
TACACAAATG ATACATAAAC ACTGTTCTGG ACCTTCCAAC TTAGAATTAC TGCAAAACAGT    240
GTCGTGATGA ATTACCTAAT TCTGTGTATG TGTGTATATT GGTAGAAAAA ATTCCTGGAA    300
GTAGAATTGC TAGAACAAG ATTTATGCAT TTAAATATT CCTTTATTAT AAAACTAATG    360
AAAGTAAACA TGTGGCTAT GACCACGTAT GCTCTATGCT CAGTTTTTCT AGAGTTGTGT    420
ATGCTTAATA TAGGAGCCTG CCTCGAG    447

```

(2) INFORMATION FOR SEQ ID NO:992:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 303 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:992:

```

GAATTCGGCC TTCATGGCCT AGCCCATGTG TGTATATTT GAATTAATTT CAAGCTTACA      60
GAAGAATTAT AAGAATTATA CAAAGAGCCC TTGTATAGCC TTCATCCAGA TTCCTCATTA      120
ATAGTTATCT CCCCCACACA CGTAATGCAC AGACACTGCA TGCATTTTCC TTTTCTTTT      180
TCTCTTCTTT CTTTTCCTTT TTCTCTCTTT CCCTTTCTCT TCTCCCTCCC CTCCCCACCC      240
CTCCCTCCC TTCTCTCCC TTCCCTCCT CCTACTCAG CCTCTAGAAT AACTAGACTC      300
GAG                                                                    303

```

(2) INFORMATION FOR SEQ ID NO:993:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:993:

```

GAATTCGGCC TTCATGGCCT AGGATTGGT AGGGTAACTT GAAACTGAG TTAATGAGA      60
AAGGTAGAAA AAATTCGTAC TTTTCTCCT CCCCACAAAA AATAAAACA GTAAAATCTT      120
TACCAACTGA AAAAGCTGTT GAAATTTCT GTATGTTAAA AAAATGAGCT TTGCAGTAAC      180
TCTTAAATC ACCTAGCAA ATAGGAATA TAATGTGCAT CTTCTCTCA CTAAACATT      240
TATTGCATCT CTTCTTGATG CTGATGATTG AGGACACACA TTCTGCTTC CTGGGGCTTA      300
TGGTTTATA TAAAACCAA AGCAAAGTAG AAAGTATACC TCCTACCAAG GGGCTCGAG      359

```

(2) INFORMATION FOR SEQ ID NO:994:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 406 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:994:

```

GAATTCGGCC TTCGCCTTC ATGCCTAGA GGAGGACCAA GGCTTCAAAG GCCCTGCC      60
GCGGTCCTG CAGGTTCCTA TTGTCCGTGT TAATAGCCTC AGATGGGCAT CAGTTGCCCT      120
GATGGGCTTG GGCTCCACGC CCGGGCTTGC ATGTTTGGA AAAATACTCA AGAGCATTTT      180
TTTTTTTTT CTTTGAGACT CCGTCTCAA AAAAAAAAAA AAAGAGATCC TCAGCTGTTG      240
TTTCTGAAT CAGATATTTG GATCACTCTA GCATCCAATC ATGCAGCTCC TAAATATGCT      300
CCTAAATCAT GCAGGTCCAA TCAGCACCT GTTTACGGT TTATCAATTT GTGCTCATCC      360
TGAATAAAT AAACAAATCC ATGAGCCAAC TGCAGCACCA CTCGAG                      406

```

(2) INFORMATION FOR SEQ ID NO:995:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:995:

```
GAATTCGGCC TTCATGGCCT ACCATCTTGG AACCTCCTCC CATGATTGCC TTATTATTTT    60
AAATACATTA ATGTAGATCA ATGAAGAATA AGAAAATAAG CAATTTTATT TTACCTTAAT    120
TTATTCTGTT TCTGATGCTC TTTGTCTCTC TATGTAGGTC TGACTTTTGG ACCTACATTA    180
TTTTCTTTCC CTCCTAGGAA TTTTAAAG CATTCTTGT AAGGCAGGCG TACTGAAAAC    240
AAATTCTCTC AATATTGCT TGTCTACAAA AGTCCTTATT TCTCCTTTAC CTTTAAAGGG    300
AAATTTCACA ACCTACAGAA TTCTAGGTTG GTGGGTTTTT TCCCCCTCAA TCCCTTAAGT    360
ATTTAATTCC TCTCTTCTG CTTCATGGT TGTAAGGAA GAGTCAGATG TAATTTTAT    420
CTTTGCTTCT GTATGGGTAG GGTGCTTTTT CTCTAGATT TTTTTCAG AGTTTTTTC    480
TTTATCTTTG ATTTTCTGTA CTTCAAATAT ATTATGCCCA GGTATAGATT GTTTTTTGT    540
CTTGTTTTGT TTTCAATTGG CATTGTCTCT GCTTGGTGT CTCTGAGCTT CCCGGATCTC    600
GAG                                                                    603
```

(2) INFORMATION FOR SEQ ID NO:996:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 461 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:996:

```
GAATTCGGCC TTCATGGCCT ACAGAGAATG AAACATGGAG CTCACATTCT GATGGGGGAG    60
AAATAAAAT CATATCAGAT GGTGATGAGC TTTTCGGTT TCTATTTCTA TTTATGAAGA    120
ATAAAATAAG GTAATAGAGA TAATGTGATG AAAATCTAA CATTCTCTAC CTTTCCTGAA    180
TTCTTAATCT ATACCTTCTG TTCTTACATT TTCTACTTAA TTTTATTTAA TACAACCTGT    240
AGCTAAACTT TTATTTTCT TTCACTCCTG ATTCTTAACC CCTATCCATG CTAATTTTGG    300
CCTTCACTAT TCCACAAAAC TTACCCACTG TCGTATTATT ATCTTCTATT AAAAGCCAGT    360
ATCTCTTTT CAGTTTTTAT CCTTCTTGAT CTACACTGAA CATGATTGCC TTCTCTCTC    420
TTATATCACT TGCTGCTATC TGCAGTCCAA CTAGCCTCGA G                                                                    461
```

(2) INFORMATION FOR SEQ ID NO:997:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 470 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:997:

```
GAATTCGGCC TTCATGGCCT AGTGATTGG GTACAGACAC AGCCAAACCA TATCATTACA    60
GATATAAATC TCTGAGTAA TCCGGTGTGTT GATTCTTCT AGCTTTTGTAG CTTATGAGTA    120
GAGGTCTTTC TCCTCTACTC CAAGAATTTT CATAGACACA CCACTTAGTA CTTACGTTTA    180
CCACCATGTG TATTATTTT AAGAATGTAC TACTTTATAT TTTTAAACAT GAAGGACTAG    240
CTCAAAATTT TGTAGCTTCC CCCCCGCCC CAATCTTTT TTTTTTTGG ACTCCTTTGT    300
```

GATGGGTAGT GGTTTAAAGA CAGCAAAACA TGACCTTAAC CAGAACTA ACTAGCTTTA	360
TACATAATTC AGCCTATGAA CATGTATCTG GCAAGAGAAA TTCCTGATCT GTGGTTCGGC	420
AGATCCATGA GAGCTGCTTC TCCGGATTTT CTTTGCTGGC CCCTCTCGAG	470

(2) INFORMATION FOR SEQ ID NO:998:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:998:

TTTAAAGAGA GTTGGGTTAT TTTCTCCAAA AGCATTGTGT GAGTTGGTCA TTTTGACAGT	60
TAACGTGTCGG TTTTACCTG CATTCTAGG TGCTAAACT TACAAGTGA TCTCTGAAC	120
ACAGGCATTG ATCCTCTACC AATGAATAAT TGAGAGAGGT AGGAATGACT GATTTTCTA	180
GTGTAGTTT GAAAGATTAA TTGATGAAT TGGAAAGTAT GGAACTATT CTGTTACTAT	240
TGCAAGAAA GATTTATTTT TTTAAAAAT TTATTTTAT TTATTTTAT TTATTTTAT	300
GGCAGGTCT GGCTCTGTCA CCCAGGCTGG AGTGCAGTGG CAGACTCGAG	350

(2) INFORMATION FOR SEQ ID NO:999:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:999:

GGAGTATTGT TACAATCACA TTTGAAGTAC CAGGAAATGC AAAGGAAGAA CATCTTAATA	60
TGTTTATTCA GAATCTCCTG TGGGAAAAGA ATGTGAGAAA CAAGGACAAT CACTGCATAGC	120
AGGTCAATAG GCTGAGGGA TTGGTGTCAA TCAAAGACAA ATCACAACAA GTGATTGTCC	180
AGGGTGTCCA TGAGCTCTAT GATCTGGAGG AGACTCCAGT GAGCTGGAAG GATGACACTG	240
AGAGAACAAA TCCATTGGTC CTCGAG	266

(2) INFORMATION FOR SEQ ID NO:1000:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1000:

GTAATGGGAG ATGGACATCC ACTGTTTCAT AAGAAGAAGG GGAACAGAAA GAAGCTAGTA	60
GAGCTGGAGG TGGAGTGCAT GGAAGAGCCT AATCACCTTG ATGTGGACCT GGAGACCCGG	120
ATCCCTGTCA TCAATAAGGT GGATGGTACT TTGCTGGTGG GTGAGGATGC CCCTCGCCGG	180
GCTGAACTGG AGATGTGGTT ACAGGTCAT CCAGAGTTTG CTGTTGATCC CCGATTCTTA	240
GCGTATATGG AGGATCGCAG AAAACAGAAG TGGCAAAGAT GTAAAAAAA TAATAAGGCA	300
GGACTCGAG	309

(2) INFORMATION FOR SEQ ID NO:1001:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1001:

```

CACGTCAGGA GAATAGAATG GAAAATTTT ATTTCACAG AAAGAAGTTA ATTTAGAAAA    60
TTAGTTTAAA ATACATTGA AAACCTAAAG AGCAAAAAGC ATTTGTAAAC AAACAAAAAA    120
TAAACCAAAA AAACCTGAT GAGGTTACTA CTAATAGTAA CTGTAGGAGG CATCTACCTC    180
CCTAGATTGG GGAAAGAAGT AGTGGTTGAA TTATCAGAAC CTAGAAGCAC AGAACAGGGG    240
CCCCTCAGAA TGTGTTCTCA GACTCCTGAG GGAAGGATGC TACCCAGCTA CAGCTGGTTC    300
CTCGAG                                         306

```

(2) INFORMATION FOR SEQ ID NO:1002:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 541 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1002:

```

GAATTCGGCC TTCATGGCCT ACACCCTGCT AATTTTGTG TTTT TTTT TAAAGGCTGG    60
GTCTCACTAT GTTGCCCAAG CAGGGTCTCG CTATGTTGCC CAAGTGGGTC TCGAACTCCT    120
GGGTTCAAGC AATCCTGCCT CGGCCTCCCA AAGGGCTGGG ATTACATGCA TGAGCCATCA    180
CATCTGGCCC CCACCCATCT TAAAAGTCAG AAATAAAAGC CAGAGCCCCT CCTTGACCTC    240
CTGGCCCCCT CCGCTTTATC ACCCCACCTC TCTGCCTGTC TTTATTGCAA AACCCCCAGA    300
AGGTTATCAG GCTCATGGTC TTCCCTCCTG TCCACACTGC CCCAACTACA CAATGAGATG    360
CCCCCATTC AACTCCCCAG CCTCCTCTGC TGGCGTCTCC TCCTTCCTAA TCTCTGAACA    420
TTGTCCCATC CAAGGGCTCA GTCCAGGTC CGTTCACCCC TTGTCCACAC TCACCCTGAG    480
AGCTTCCAGT CTGTGGCCTC CATGCCCTGG AATGAGCCCC TGTAAGATCC ACAATCTCGA    540
G                                         541

```

(2) INFORMATION FOR SEQ ID NO:1003:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 602 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1003:

```

GAAACGCCTC CTGATTTTGT CTTACAATGG AACTTAAAA GTGCCTGAC GGTGGATGGG    60
GCTGGGTGAT TGTGTTTGTC TCCTTCCTTA CTCAGTTTTT GTGTTACGGA TCCCCACTAG    120
CTGTTGGAGT CCTGTACATA GAATGGCTGG ATGCCTTTGG TGAAGGAAAA GGAAAAACAG    180
CCTGGGTTGG ATCCCTGGCA AGTGGAGTTG GCTTGCTTGC AAGTCCTGTC TGCAGTCTCT    240
GTGTCTCATC TTTTGGAGCA AGACCTGTCA CAATCTTCAG TGGCTTCATG GTGGCTGGAG    300

```

```

GCCTGATGTT GAGCAGTTTT GCTCCAATA TCTACTTTCT GTTTTTTCC TATGGCATTG      360
TTGTAGGTCT TGGATGTGGT TTATTATACA CTGCAACAGT GACCATTACG TGCCAGTATT      420
TTGACGATCG CCGAGGCCTA GCGCTTGGCC TGATTCAAC AGGTTCAAGC GTTGGCCTTT      480
TCATATATGC TGCTCTGCAG AGGATGCTGG TTGAGTTCTA TGGACTGGAT GGATGCTTGC      540
TGATTGTGGG TGCTTTAGCT TTAAATATAT TAGCCTGTGG CAGTCTGATG CGACCCCTCG      600
AG                                                                           602

```

(2) INFORMATION FOR SEQ ID NO:1004:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 378 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1004:

```

GCGGCAATGA TACCCACTGC CAACCAACAA AAATTGGCTG CAACCATCCC CTACCAGGAC      60
CGAGCCCCTA CAGGTGAGCG GCTCTGCCAG GCCCTGGCTC CTGCCCCGAT GCACCCAAGC      120
CGGAGCCTGG GGCAGCTCCT ACGAGGCTCA CCAGGGCCCC AGCAGGATGC CTGGGTCCCC      180
TGCTCCTGCT TGGCCAAAGG GAAGAGGAAG CAGCAGGCAG GGGCTGGGGA GGCCTTCATG      240
AATTACATGA ATTATCCTTC TTTTTTTTTT TTCCCTTTT TTTTTTTTTT TTTTTTTTTT      300
TTTTTTTTTT TTTTTTTTTT TGAGANNCCA NTTNAAAAAA AAAAGGGGGG GGTGTCAGGG      360
TTCATTCAG AGCTCGAG                                                     378

```

(2) INFORMATION FOR SEQ ID NO:1005:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 208 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1005:

```

GAATTCGGCC TTCATGGCCT ACTGTTTTAT TTCCCGCTTT TATTTTGCTT TTGAAATCTT      60
TTTCCTTGGT GGATTTGTAC GTGTCTTCAC TAGATGCCTC AAATTAAGTC TGACCACAAT      120
CCTACTCTAC TTTCTACAGT GGAGAGACCA TCCTCCCTGC CCCAGGGCTG TCTCCACCCA      180
CCCCCCTTC CCCACCGCA CCTCGAG                                           208

```

(2) INFORMATION FOR SEQ ID NO:1006:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 396 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1006:

```

CTGATCTGTG AACCTTACAC GAGCAAGGAA TTATTCCGGG TTTGGATAC ACCCTACTTA      60
CTAAATGAAG ACTGGGAATA CTATCTCTCT GGAAGCTAT TTAATAAATC AAAAATGAAG      120
CTCACTTTTG AACAAAGTTA CAGTGACTGC AAAAAAATA GAGGCACTTA CGGCACTCTT      180

```

CACCTGCAGA ACAGCTTCAA TATCAGTGAA CATCTCAACA TTAATGAGCA TACTGGAAGC	240
ATAAGCAGTG AATTGGAAAG TCTGAAGGTA AATCTTAATA TCTTTCTGTT GGGTGCAGCA	300
GGAAGAAAAA ACCTTCAGGA TTTTGCTGCT TGTGGAATAG ACAGAATGAA TTATGACAGC	360
TACTTGGCTC AGACTGGTAA ATCCCCGCT CTCGAG	396

(2) INFORMATION FOR SEQ ID NO:1007:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1007:

GAATTCGGCC TTCATGGCCT AGATGGGGC TAGTTTTGT CATGTGAGAA GAAGCAGGCC	60
GGATGTCAGA GGGGTGCCTT GGGTAACCTC TGGGACTCAG AAGTGAAAGG GGGCTATTCC	120
TAGTTTTATT GCTATAGCCA TTATGATTAT TAATGATGAG TATTGATTGG TAGTATTGGT	180
TATGGTTCAT TGTCCGAGA GTATATTGTT GAAGAGGATA GCTATTAGAA GGATTATGGA	240
TGCGGTGCT TCGTGAGGA AATACTTGAT GGCAGCTTCT GTAGCTCGAG	290

(2) INFORMATION FOR SEQ ID NO:1008:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1008:

GTGGTTCTGA AATCACCCTT CCTTTTCACT CCTCTGCCCT GACTTCCTCT CTCACCATGC	60
TCTCCTGCTC TCCACCTTCA CCTCTTTCAG TGGGATTCT GCATTTCAGC CAGAGGGACC	120
TGTCTGCAGC TACCAGATGC TCCCCACCCT GGGAGAGCTC AGCGGCATGT CTGCACATGG	180
GCCTTTTCAG CCTTCTTCAT CCGCAATTG GAACTGACTT TCCCACTCCC ATCTCACACT	240
TGAGAATCTC TGTTCCTGT TTCTTGT TTTATTTTAT TTTATTTTCT CTCCCCCTG	300
GCGGACTCGA G	311

(2) INFORMATION FOR SEQ ID NO:1009:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 391 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1009:

GGANCAGAGT CCAANAGATN AATTATATTC AGAAAACTCT GTTCAAGATA GGGTATGATT	60
ACAAATTGGA ACAGATCAAA AAGGGATATG ATGCACCTCT TTGCAATCTG TTAGTGTTTA	120
AAAAGGTCAA GGCCTGCTG GGAGGGAATG TCCGCATGAT GCTGTCTGGA GGGGCCCCGC	180
TATCTCTCA GACACACCGA TTCATGAATG TGTGCTTCTG CTGCCCAATT GGCCAGGGTT	240
ATGGACTGAC AGAATCATGT GGTCTGGGA CAGTTACTGA AGTAACTGAC TATACTACTG	300

GCAGAGTTGG AGCACCTCTT ATTTGCTGTG AAATTAAGCT AAAAGACTGG CAAGAAGGCG 360
GTTNTACAAT TAATGACAAG CCAAACCTCGA G 391

(2) INFORMATION FOR SEQ ID NO:1010:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1010:

GGGGAAGAAA GCGTAAGGA TGGTGAAGCT GAACAGTAAC CCCAGCGAGA AGGGAACCAA 60
GCCGCCTTCA GTTGAGGATG GCTTCCAGAC CGTCCCTCTC ATCACTCCCT TGGAGGTTAA 120
TCACTTACAG CTGCCTGCTC CAGAAAAGGT GATTGTGAAG ACAAGAACGG AATATCAGCC 180
GGAACAGAAG AACAAAGGGA AGTTCGGGT GCCGAAAATC GCTGAATTTA CGGTCAACCAT 240
CCTTGTCAGC CTGGCCCTAG CTTTCCTTGC GTGCATCGTG TTCCTGGTGG TTTACAAAGC 300
CTTACCTAT GATCAGAGCT GCCCAGAGGG ATTCGTCTAT AAGCACAAAC GCTGTATCCC 360
AGCCTCCCTG GATGCTTACT ACTCCTCCA GGACCCCAAT CCCAGAAGCC TCGAG 415

(2) INFORMATION FOR SEQ ID NO:1011:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1011:

GCCGACTAC CACAAGCCCC ACCCACTA TGCCAAGCCC TACCCATACC ACAGCAAGCC 60
CCACTCATA TTCCACAAGC CCCACCATA CCCCACAAG TCCCACCAC AAAACAGTA 120
TGTCACCTCC CACCACTACA AGTCCTACCC CCAGTGGTAT GGGCCTAGTC CAGACTGCCA 180
CAAGTCCAC CCATCTTACC ACAAGCCCCA CCCATCCAC CACAAGCCCC ATCCTTATAA 240
ATGTAAGCCC TTCCACTTCT CTAGAACTTG CTACCCTCTC CAGCCCCCTCC AAACACTCAG 300
ACCCACCCCT CCCAGGCACT GACTCCCTTC CCTGTAGTCC CCCAGTCTCC AATTCCTACA 360
CTCAGGCAGA CCCTATGGCC CCCAGAACTC CCCACCCAAG TCTCGAG 407

(2) INFORMATION FOR SEQ ID NO:1012:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 291 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1012:

GAATTCGGCC TTCATGGCCT ACGCCGCCGC CACAATGGGC CGCGGAGTTT GGGAATCTGA 60
CGCGGATGCG GCATGTGATC AGCTACAGCT TGTCACCGTT CGAGCAGCGC GCCTATCCGC 120
ACGTCTTCAC TAAAGGAATC CCAATGTTT TCGCCCGCAT TCGGGAGTCT TTCTTTCGCG 180
TGGTGCCGCA GTTTGTAGTG TTTTATCTTA TCTACACATG GGGGACTGAA GAGTTCGAGA 240

GATCCAAGAG GAAGAATCCC GCTGACCATT GAATTCTAGA CCTGCCTCGA G

291

(2) INFORMATION FOR SEQ ID NO:1013:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 351 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1013:

GAATTCGGCT TCATGGCCTA TGGATTACCT GAGGAAGAAG AGATCAAGGA AAAAAACCC	60
ACCAAGTCAAG GAAAGTCAAG TAGCAAGAAG GAAATGTCTA AAAGAGATGG CAAGGAGAAA	120
AAAGACAGAG GAGTGACGAG GTTTCAGGAA AATGCCAGTG AAGGGAAGGC CCCTGCAGAA	180
GACGTCTTTA AGAAGCCCCCT GCCTCCTACT GTGAAGAAGG AAGAGAGTCC CCCTCCACCT	240
AAAGTGGTAA ACCCACTGAT CGGCCTCTTG GGTGAATATG GAGGAGACAG TGACTATGAG	300
GAGGAAGAAG AGGAGGAACA GACCCCTCCC CCACAGCCCC GGCAGCTCGA G	351

(2) INFORMATION FOR SEQ ID NO:1014:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 596 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1014:

GCTCGAGTCG GATCCTCCCT GAATGTGGAG CGATGGGGGG TTGCACACAG GCCGTCTGCG	60
CCCAGCAGCT AACAGAAAG ACCCTGCGAT TCCTCCCTGC ATCTCTCCCT TTTGGGTCCT	120
ACTAATGTCT GTTGAATTC TCTTTTTC AAAGCAAAAT CCTTCTCTGC ATTTTGTCTG	180
CTTGCTGTT TCCCAGAGCC GCAGGACTCT CTCCTGTCT GGAGTTCAG AGAGCCCCCA	240
CTTCTCTTT CTAAGCTGTG TTGTGTGTT CCTGGTACAT TCTAGGTTCC CCAAGATAA	300
ACATGACTAA GGATTGAAA GGAGGAAAG CCGCGCAGAT TGTTAATCTG AAAGTCAATC	360
CCCGGATTTA GCTCTCAAAA ATGCTTTATT TTTGGAGAAA AGCAATAGAG TAAGACAGAA	420
GGACTTAACG CTGTCAGGA AGTGGCTTC TGCCATGTAG AGCCAGGCTG GCAACCTGCC	480
CTCTGCCATC AGGGAGTGAG CATGAACCTG GAAACCTCTA GGACGCAAGA GCGAGGCTGG	540
CTGTCCCCTC GTGTGCAGTG CTTAGACCTT CTGCCACAC ATCCCATCCC CTCGAG	596

(2) INFORMATION FOR SEQ ID NO:1015:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 353 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1015:

GAATTCGGCC TTCATGGCCT ACTTGGTTTT GCTGACCAAC AAATATGCAT AGTGTCTATT	60
CACAGTTATA CAGTAATAGG TTAGAACAGA AATAAATGCC AGCTTCTTAT GATGCCTTTG	120
CCAACAATCA GGCCATGTGT TTCAGGACCC TTCCTTCCTC TGACTGTGT AGCATTACAC	180

CTCAGCACAC GACTTCTTGA AAGAGTGAAC CTCCAGGGCT TGCTCTCTCA GATGCACCTG	240
GGCAGCAGCA GGAAGTGTCT GACAGTCTCT CCTGTCTCCA TAAAGTAGCG GGCTGGCTCT	300
TTGCTGGGAG TGATGGGAGC CACAGATACG TGCATGGAAG TTACTGCCTC GAG	353

(2) INFORMATION FOR SEQ ID NO:1016:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1016:

GAATTCGGCC TTCATGGCCT AATTATTAAG TAAATAAGG GTTCCTTGAA TATAGGCACT	60
GCAAATACCA TGACAGTGAT CTGATCACTG AGCTAACTAC TGAGTGACTC AGAGGCAGGT	120
GATGTATACT GTGTGGAGTG GAATGGTGAG AGATTTCATC ACACTACTCA GAATTGCATG	180
AAACTTAAG CTTATAAATT GTTTAATTCT GGAATTTTTC ACTTAATATT TTCTGACTGA	240
GATTGCCAC GGGTAACTCA AACTGTGGAA AGCGAACTG CAGATAATGG CGGACTCGAG	300

(2) INFORMATION FOR SEQ ID NO:1017:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 491 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1017:

GCGATTGAAT TCTAGACCTG CTCGATCTCA TGGGCGAGAT GAAATTCTCT TCCTTAGAGG	60
AAAGGGAAG GTGAGGCCCC AGAGGACTTA TCTCAGCTGT ACATGCTCTG CCTGTGGAGA	120
CATGGCTTTT CTTTGTGCTG TGGCAGACTG GGGCTTTGGA AGTGGTGATAT GTTTAACTTA	180
CCTGAGAGTG AGAGATGTGT AGGAAGAATA GCTGGAAGAA AGTGAAAGAT GAGTGCCAGT	240
ACTTTTGGCC TGTATCCAG TAGAGAGAAA GTGACAGTGA AAGTAACGTG AGAGAGAAAG	300
AGTGTGTGTG TATATGTGAG AGAGAGAAAG AAAGAGAAAG GAATGCTTGA TTGCTTGTTC	360
TTCAGTGGC CAGCTCTGAA ATCCAAAATC ATGCCTTGAT AACATTACAA AACCGTGATC	420
CTGGGTTTGA GTGAATCCTA GAGACATTGT TCTTATGGCC GCCTGGTTTC CGCAGCATGA	480
TCACCTCGA G	491

(2) INFORMATION FOR SEQ ID NO:1018:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 323 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1018:

GCTTTTCCAT GAAAGTGGA TCGAGATCTA CTGCCAGTGG GTCAACAGGT TCTAAATTGA	60
AATCAGATGA GTTACAGACC ATCAAGAAAG AATTAACCCA GATCAAACT AAAATTGACT	120
CCTTGCTAGG GCGCCTGGAG AAGATTGAGA AACAGCAGAA GGCGGAGCA GAAGCTCAGA	180

AGAAGCAATT GGAAGAGAGT CTAGTGCTGA TCCAAGAGGA ATGTGTGTCA GAGATTGCAG	240
ATCACTCTAC AGAGGAGCCT GCTGAAGGAG GGCCAGATGC CGATGGAGAA GAGATGACAG	300
ATGGGATAGA GATTGGACTC GAG	323

(2) INFORMATION FOR SEQ ID NO:1019:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1019:

GGTCACAATC TCCTTGCACT CCAGGACTGG GCATACTCAT ATGCCTTCTG TGGTGGCGT	60
CCTTGATTTT ACCCAGTTT GGTCTGGTT TCCTCTTTCA CACTTCCTGT CATTGGCTTA	120
TACCCCTACC TGTGTCATTG GCCTTAACAA GGACTTAAAG ATGCCGAAAG TTCAGTATAA	180
ATCGAAGTGT AAACCATCCA CATTGCATA TCCTGCCCTT CTGGAAGTAC CAAAGAAAAA	240
AGAAAAGGAA AAGTTTCTA CTGCTGTATT ATCTATAACT GCCAAGGCTA AAAAGAAGGA	300
AAAAGAAAAG GAACTCGAG	319

(2) INFORMATION FOR SEQ ID NO:1020:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1020:

GCGGGCATGG TGTGTAGCCT ATGGGTGCTG CTCCTGGTGT CTTCAATTCT GGCTCTGGAA	60
GAGGTATTGC TGGACACCAC CGGAGAGACA TCTGAGATTG GCTGGCTCAC CTACCCACCA	120
GGGGGGTGGG ACGAGGTGAG TGTCTTGGAC GACCAGCGAC GCCTGACTCG GACCTTTGAG	180
GCATGTCATG TGGCAGGGGC CCCTCCAGGC ACCGGGCAGG ACAATTGGTT GCAGACACAC	240
TTTGTGGAGC GCGCGGGGCG CCAGAGGGCG CACATTGAC TCCACTTCTC TGTGCGGGCA	300
TGCTCCAGCC TGGGTGTGAG CGGCGGCACC TGCCGGGAGA CCTTACCCTT TACTACCGT	360
CAGGCTGAGG AGCCCGACAG CCCTGACAGC GTTTCCTCCT GGCACCTCAA ACGCTGGACC	420
AAGGTGGACA CAATTGCAGC AAGACTCGAG	450

(2) INFORMATION FOR SEQ ID NO:1021:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1021:

GAATTCGGCC TTCATGGCCT ACTAGACCTG CTTTTTGGAA GAGAATGCTT TTCACCTGTT	60
CTTTTTTTAA TCCACCTGGC ACTTTCCTCA GGACCCAAAC TGTTCACTC TGCTGCTTCT	120
TGATGTATCA ATTTTGGGAC ATCACCTGTT GTCTCCTTGC TGTGAATGAT GAGGATTTGG	180

CCCATATTAC CCCCGTTCCT TCCCCGGTCA TTCTCTCGGT TGCCTTTGTC ACTTTAAATC 240
 ATTTACATAA ACCACAACCTT CTCGAG 266

(2) INFORMATION FOR SEQ ID NO:1022:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1022:

GAATTCGGCC TTCATGCCTA AGAACTTAT TCGTCTCAG CATGAGAATA AGATGTTAAA 60
 GCTTAACCAA GAAGTTTCGG ACAATGAAAA AATAGCCTTA TTGCAGAGCC TTCTAGATGA 120
 TGCAAACTCA CGCAAGAATG AACTGGAGAC AGAGAATAGG CTGGTGAATC AAAGACTTCT 180
 GGAAGTACAG TCACAAGTTG AAGAATTACA AAAATCTTTA CAGGATCAAG GCTCAAAAGC 240
 AGAAGATGCT ATTTCACTCC TTCTAAAAAA GAAGCTTGAA GAACATCTAG AGAAGCTGCA 300
 TGAGGCCAAT AATGAACAC AGAAGAAGAG AGCCATTATT GAAGATCTCG AG 352

(2) INFORMATION FOR SEQ ID NO:1023:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 249 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1023:

GAATTCGGCC TTCATGCCTT ACAAAGCCA CCAGGTGAAT AAATGCCATT TTCTTTTGGC 60
 CTAGACATTG TTCATTTACT GAAAATGAAC AAGGTAATGC TCAGCATACA AAAAAAATT 120
 AAAGTTCTCA AGATCCCATG CTTTCTGGAT TCCTCTGTAT TTATCACTCA AGTCATCCCC 180
 CTTTTTGTA TCTCGCTTTT TGTCCTCGCT TTATTTAAAT CCTTTATATC ACTACCCCCA 240
 TCTCTCGAG 249

(2) INFORMATION FOR SEQ ID NO:1024:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1024:

GAATTCGGCC TTCATGCCTT ACAGGAAATA GGCAAAAATA CCCAGGAAAA GGAAACAGTT 60
 TTATGCATTA GTGCTGTACC TTCTTCATAT TGTCAAAAAT AAAAGATAGT AGAGATTTAT 120
 TGAAACATT TTAAATAAAG AAGTTGTGTT CATAATATAA AGCTGCCTTA AACTATATAT 180
 GAAAAAACT GTAAATCATA GAAATAACT TTATCAAAGA TGTAAATAA TACATTTTAC 240
 AGAATAATTT CCCATGGGCT TCTCGAG 267

(2) INFORMATION FOR SEQ ID NO:1025:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 232 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1025:

```
GAATTCGGCC TTCATGGCCT AGCCATCTTA TTTGAACTAT ATTTTCCTT CAAAGAAGCA    60
ATAGGTCTCA ACATAGTGTA GGTAGCATCA GGTGACAGAA AGCCAATTTT ATTTTCAAAT    120
TTAAGTTAAT TATCTTCGTG ATCCTATTTA TCCACAATTT CTTCAGAAA AGACTGAAAA    180
AACACATTAT ATTCAGGAGA TATAATGAAA TTATTGGAAG GCATCACTCG AG          232
```

(2) INFORMATION FOR SEQ ID NO:1026:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 153 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1026:

```
GAATTCGGCC TTCATGGCCT AGATTGAATT AGACCTGCCT CGAGCCCCTA AAAATATCCT    60
AAATGCATTT CCTCCTCTGC ATTCTAACTA CTGCTGCCCT TGTCTAGGA CTCCACTCTC    120
CCACATCAAC CAACTTTTCT CTTGGCCCC CTC                                153
```

(2) INFORMATION FOR SEQ ID NO:1027:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 294 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1027:

```
GCGAGGGCCA GGGAGGGAGG AAGCAATAAA TAGGGGGAGA AAATGGCAAT AAGACGTTAT    60
ATAGCCCTTC TAACAAAAAT ACCAGAAGGG AGGGGTGAGG GACAAGGCTG TCTGAGGGAG    120
GGCAGGAGGT GAGGCCATGG CTTGGTCTCT TTTGCGCTTG GATGGCCGTC AGCTCAGCAT    180
GAGGCATCTG AAAGAACTAC CCAGATTGCA GAAGAGAGAG GTCCCAGCCT CCTTGAAGG    240
ACATGATGGG GGAGGAGTGG AGACAACAGC TGAGTGTTAC CTGTAAAACT CGAG          294
```

(2) INFORMATION FOR SEQ ID NO:1028:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 285 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1028:

GAATTCGGCC	TTCATGGCCT	ACACACATAC	CCAACACACA	CACAGACACA	CACATACACA	60
GAATCAACAC	TCAACACGCA	AACACCCAAC	ACACACATGC	ACACACACTT	TCTGAAGATG	120
AGTTTTCTCA	TTTATGAAAT	GAGCTCATCT	GGACTTGCCA	TGAGGGTCCA	ACAGGTGCCA	180
TGCAATCAGG	TGTGCACTCA	GTATGGGCTG	GGTGGAGATG	GCCATCTCCT	TTCCCGTCCA	240
GGCCTGGTTC	CTGTGTGCTG	GGCCTCTGCT	CTTCCCCCCC	TCGAG		285

(2) INFORMATION FOR SEQ ID NO:1029:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 263 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1029:

GACAAGCTGA	GAAAATGAAA	GGAAAAGTAG	AAGAATTGTC	TAATCAGTTA	CATCGCAGTC	60
AAGAGGAGGA	AGGAACACAA	AGAAAGGCCT	TGGAAGCCCA	AAATGAAATA	CATACCAAAG	120
AGAAGGAGAA	GCTGATTGAT	AAGATTCAAG	AAATGCAGGA	GGCCAGTGAC	CACTTGAAGA	180
AACAATTTGA	AACTGAAAGT	GAAGTCAAGT	GTAACCTCCG	GCAGGAAGCA	TCCCGGCTCA	240
CTTTGAAAAA	CAGGGAATC	GAG				263

(2) INFORMATION FOR SEQ ID NO:1030:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1030:

GAATTCGGCC	TTCATGGCCT	ACCTCCTACA	AATTTAATT	TTTTATGAAA	TTTTAGGTG	60
ACTTGTAAT	TCTTCATGTA	TGAGGAGTTG	TGTTTATTAA	TGCTACTTTT	TAAATTTTCC	120
TGTGCCATGT	GGCAGATGTT	TATTCTCTTA	ATGCACTTCA	GGTTTGCTAT	CTGTAAAGCC	180
TTTGACCCAG	GCCTACTGAG	TCAAATCTAC	ATTCAGTGTA	ACATTAAAGG	CAGAAACCTC	240
GAG						243

(2) INFORMATION FOR SEQ ID NO:1031:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1031:

AATTCGGCCT	TCATGGCCTA	ATTGAATTCT	AGACCTGCCT	CGAGATTACA	GCCAGAGTCT	60
CCTAACTGCT	CTCCATCTAT	TCTCTAATCC	CAATAGCTAC	TCTCCATGCA	GCTGTCAGAG	120

TGGGCCTTAT AAAACATTGG TCAGGTCATG CCAGGCCTCC GATGGCTCCC ATCACACTCA 180
 GGGTAAGAGC CGAAGCCCCA TGTGGGTGTC TAAGGCCCCG TGTGATCCTT ACCCACTTCT 240
 CTCGAG 246

(2) INFORMATION FOR SEQ ID NO:1032:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 114 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1032:

GAATTTACAC CTGCCTCGAG TACTCCCATG CCACTTTCAG CACAAATATC ACTTATTATG 60
 TGCTGCTTGA ATATTATTTT CTTTATTTCT AAGTTTGGTC CATTCACTCT CGAG 114

(2) INFORMATION FOR SEQ ID NO:1033:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 302 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1033:

GAATTGTTGT TCTTTTCTTT TCCATGATAT CATTATATGG ACAGTTTAGG GTGGTCTCAT 60
 GGATTATAAC CATTGGATA TTTGGTTCAC TAACAATTTT CTTACTGGCC AGAGTTCTTG 120
 GTGGAGAAGT TGCATATGCC CAAGTCCTTG GAGTTATAGG ATATTCATTA CTTCCCTCTCA 180
 TTGTAATAGC CCCTGTACTT TTGGTGGTTG GATCATTGGA AGTGGTGTCT ACACTTATAA 240
 AACTGTTTGG TGTGTTTGG GCTGCCTACA GTGCTGCTTC ATTGTTAGTG GGAGATCTCG 300
 AG 302

(2) INFORMATION FOR SEQ ID NO:1034:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 262 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1034:

GAATTCGGTC TTCATGGCCT ACCTGAGCAC TCTGCATTTT AATTCTGTGT TCTTCCCTT 60
 TATCTATGTG TTGCTCTGTA GGAAATGTCC TTTAATGTCT TCCTCAGGCT TGATACCTAA 120
 TTTGAGATGG TTCAAACAAT TTTTCCCTTT TCCCTTCACT GGAAGCTTTG TTAATCATTC 180
 TGTGTTGCTTT CATACTTTCA AATGCTGTCT TTTTATTTT GGTGGTATTT TTTTCTCTTT 240
 TCTCAGGTGT AACATACCTC GG 262

(2) INFORMATION FOR SEQ ID NO:1035:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1035:

```

GAATTCGGCC TTCATGGCCT ACCTACTAGG CATGTTTAT GACACAGATG ATGCGAGTTT      60
CAAGTGGTTT GATAATTCAA ATATGACATT TGATAAGTGG ACAGACCAAG ATGATGATGA      120
GGATTTAGTT GACACCTGTG CTTTCTGCA CATCAAGACA GGTGAATGGA AAAAAGGAAA      180
TTGTGAAGTT TCTTCTGTGG AAGGAACACT ATGCAAAACA GCTATCCCAT ACAAAGGAA      240
ATATTTATCA GATAACCACA TTTTAATATC AGCATTGGTG ATTGCTAGCA CGGTAATTTT      300
GACAGTTTGG GGAGCAATCA TTTGGTTCCT GTACAAAAAA CATTCGTATT CTCGTTTCAC      360
CACAGTTTTT TCAACCGCAA CCCTCGAG                                     388

```

(2) INFORMATION FOR SEQ ID NO:1036:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 258 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1036:

```

GAATTCGGCC TTCATGGCCT ACTTTTGTAGT AAAGAGCAAA CTCATAAATT TTGGCATCAG      60
AGTTTGAGCT TTATTTTCT TAAATGAGTT TGAAATCAAT TTAATATTC TCTCCAATTC      120
CCTAATGTCT CAGAAGTGAA TTTACAGTAT ACCTTTGTTT TTTCGTATTC TTAAGTAGTA      180
TTTGGATTTT ATTTAGTAGT TGCACTACTA AATAAGGAGT GGGGAGTTAA TTACAAAACG      240
AATCAGGTGA CTCTCGAG                                     258

```

(2) INFORMATION FOR SEQ ID NO:1037:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 85 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1037:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTGA TTTGGCCTGC ATGGTTTTCC TCCTACCCCT      60
TTTTCTTTGC CTGGGTCAGC TCGAG                                     85

```

(2) INFORMATION FOR SEQ ID NO:1038:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 248 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1038:

CGGATTGAAT TCTAGACCTG CCTCGAGGGG TTTGGAGCTC TGTGGGTGG TGACCTCAGT	60
CCTGTTTACC CCTGCAGAAG AAGGACCCAG CCCAGTTCCT GCAGGTACAT GGCCGAGCTT	120
GCAAGGTGCA CCTGGATTCT GCAGTCGCCC TGGCCGCTGA GAGCCCTGTT AATATGATGC	180
CCTGGCAGGG GGACACCAAC AACATGATTG ACCGATTCTGA TGTCCGTGCT TAGGCCATGA	240
AGGTCGAG	248

(2) INFORMATION FOR SEQ ID NO:1039:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1039:

GAATTCGGCC TTCATGGCCT AGTCACTTAA ATAGATTGG TGTGAAATT TATGATAAAA	60
GGTGACTTTT GTTCTAGTAA GTATTCTCAA AGAAAAGAGA GTGAGTAGCT ATTTGGGAT	120
GAAGATAGTT ATAACGAGA TAGCGGTTT TGTTTTGT TTTGTTTTT GGCCGAGCG	180
GAGTGCTGTG GTGCGTCAT GGCTCACTGT AACCTCAGCC TGGGGTCAAG GTCTGCCCAT	240
CTCAACCTC GAG	253

(2) INFORMATION FOR SEQ ID NO:1040:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1040:

GAATTCGGCC TTCATGGCCT AGTTCAAAA TAAAGCAAAT ATTTATTTTG GTATTGTTTT	60
GAGCACAGCT GATTTTAAAC ATTTCTTTC ATAACACTCA GAAATCATTA ACAATTGTTT	120
GCTCATTTGG TATGGGTTTT TTGTTCTCTT TTTTTTTTTG GGTTCTTTTA GGTGCTTTCT	180
TTTAACATTG GTCATGTTTC ACCCTTTTTT TTTTCATCCC CCCAGTCTCG AG	232

(2) INFORMATION FOR SEQ ID NO:1041:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1041:

GAATTCGGCC TTCATGGCCT ACAAGGACGT TAAAGGCATT TTATTCCAGC GTCTTCTAGA	60
GAGCTTAGTG TATACAGATG AGGGTGTCG CTGCTGCTT CCTTCGGAAT CCAGTGCTTC	120
CACAGAGATT AGCCTGTAGC TTATATTGA CATTCTTCAC TGTCTGTTGT TTACCTACCG	180

TAGCTTTTTC CCGTTCACTT CCCCTTCCAA CTATGTCCAG ATGTGCAGGC TCCTCCTCTC 240
TGGACTTTCT CCAAAGGCAC TGGACCCTCG AG 272

(2) INFORMATION FOR SEQ ID NO:1042:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1042:

GAATTCGGCC TTCAGGGCCT AGATTAAATC TCAAGGTGGA CTAGGAGAGA ACAAGCAGAC 60
TTCTATAGAA CAGTGTCTTC CTTGGTGTT GTTTACGATC AAGAAAAGAA AACCTTTGAC 120
TGGACACAGT TCCGCATCAT TTCCCGTTT GACAAGAAGT CCGATGAGAG CCTGGAACAG 180
TATTTTATA GTTTGTGGC CATGTGCCG AATGTCTGTC GTCTACCCAC ATGGAAAGAT 240
GGCGGTCCCC CAGATACCAC CATCTACGTT GAACCCATTA CTCGAG 286

(2) INFORMATION FOR SEQ ID NO:1043:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 230 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1043:

GAATTCGGCC TTCATGGCCT AGTGTAATCT TATTGGGAAC CTAAACTGTC TCTTAAAGTC 60
TTTTTGAAAA CTCAGACATA TTTTGGCAT TACCTTTTTT TTATTGGAAA GGAAAAATGA 120
AAACCTTTCA TTTTATTAAT AATTCTATAT TCCACTCCTG TATTTCTTC TCTTGGATGA 180
TGATGGTGAT ATTATTTCTC ACTTTTCAAA ATAATACCCT GGGACTCGAG 230

(2) INFORMATION FOR SEQ ID NO:1044:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 238 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1044:

GATTCGGCCT TCATGGCCTA GGGAAAATAA AAATGTATTC AGTAGCACGT GGGTTATGGT 60
TTCTCATAGA CCAGGGGATA AGATTAAAAG TCACTGAAGA GTGGGAAAAT GCATGTTGAG 120
AAGATGAGAA TGGCCTGTAT TTCTCCAGG GGAATCTGTG TAATGTGCCT TTCCCTCTC 180
CAAATGCCTA GAACCATGGC ACTGTGTCTT ATTTATTTAA CCGTTGGGCC GTCTCGAG 238

(2) INFORMATION FOR SEQ ID NO:1045:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1045:

```
TAATTCATCT AAGTTGTTGA ATTAGCATAA AGTTTTTAAT AAAATTTTAT GTAATTCCTT    60
TTTAGAGAAC TAACTTTTGA AATTGCTGAT TTTCTGTTT CCGTTTCAAC ATTTTACACA    120
CTGGTAGTTA ATAGTTTTTT CTCTCCAGCT TACTTCGTGT TTGATTACT TTCCTTTTC    180
TGTCTTCTTG AGGTGGAAGC TTAGAGGATT AATGATTCCA TTTCTTTCTA ACGAAATCAC    240
TTAAACTAT AAATTCCTACT CCAACTACTT CTTAGCTAA ATTCCATAAA TTTTACTATG    300
TTGTGTTTCC CTTTTTCACT CCGTCTCCTC GAG                                333
```

(2) INFORMATION FOR SEQ ID NO:1046:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 429 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1046:

```
GAATCTAGA CCTGCCATTG TGGGGAGTGG AAGTGCCATG ACCTCAGGAG CCAGTCTCTGA    60
GTCCAGGTGA ACCAAGCTC AGTTTCTTTC ATCTTTGAAC CTGAACCTCT TACCTCCAAG    120
AAAAAGGGCC CAGGAATTG GGCCTTCTTG TTTATTGTG CTCCTGCCCC TCTCCCTATC    180
TAACCCCTGG GTAAGGGTGA GCTTGAAGGT GATGGTGACA GTGGCTTCTG TGTGTGTCAG    240
TCCACCCTCC AAGCAATGCT TAGAAACCAG TCCATAAGCC AATTAAACACA TCATTTTGTAG    300
GGCAGATTG CAAGTTCTCA GTTGTTTACA TGTTTCGTTA AGTACTAACC TCCAAATTAA    360
TAAAGCATGA CACATGACAT CACACATTTC ACAATTTGTA CCCAAGCAAA GTTCATGGAG    420
GTACTCGAG                                429
```

(2) INFORMATION FOR SEQ ID NO:1047:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1047:

```
GCTTGGTAGA CCACATCCAA GGGACGATGA GGTTCCTCAG AGGAGGAGTG GTCACCATGA    60
TCGAG                                65
```

(2) INFORMATION FOR SEQ ID NO:1048:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 498 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1048:

```

GAATTCGGCC AAAGAGGCCT AAATTGGTT TAATGTGTCA TCAAACTTGG TATTCAGCTA    60
TCTAGAGCCA TTTTCTGGAT TCATGCAATA CATTTCCTCC AAACCTTTT TATTTGAAA    120
AAGCTCAAAC ACAGAAAAGT TGAAAGAATA GCGTAAAGAA CATCTGGATG TGGTGCAGGG    180
TCTCATGTTC ATAATCCAG CACTTCGGAA GSATTATTTC AGACCAACCT GGGCAACATA    240
GTAAGACCCA ATGTCTACAA AAATGTTTAC GSATAAACCA GCGTGGTGG TGAGGTAGTC    300
CCAGCTACTC AGGAGGCTGA GGTGGGAGGA TTGCTTGAGC CCAGGAGTTC AAGGCTGTAG    360
TGAGCAATAA TCACATCACT GCATTCCAGC CTTGAGTAAC AGTGAGACCT GTCTCAAAAA    420
AAAAAAAAAA AACACCAAAA ACAACCAACT GTGTATATCT TGCACTGATA ATCCCCCGAA    480
TTCTAGACCT GCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1049:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 443 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1049:

```

GAATTCGGCC AAAGAGGCCT AAGCTGAGAT GGGTGTTAAA AGTTAAGACA CAGCTTAAGA    60
CAGAAGCATT GTAAACAGG AACAAATACT GGCTTAAACC TGATGTCTCT AACTATATTC    120
CTCTATTTTA AGAATGTTT AGTATCTGAT AGTTTCATCA GCCTTTCCAT TTTCCAATAT    180
GTGACCTTTA TTCCACCAT GTCCCAAATA AACGAGTCCT AGGATTTCTT AGAAGGTGGA    240
CCTCAATTAT TGTGTCCCTT TTATATATAA GGCAAACATT GCTTTTAAGT TCTGTTGGAA    300
CATGGGAAC TTTACTAGAA TGCTTAGAAT GTTCAGAAAA AATGTCCCAA AGCTCTCTTC    360
TGGTCCATAC AAGACAATCA GAATGTAACA CAGTAGCAGA GGGTGTGGAA CATACACTAG    420
TCATATTTGA TTCTCTCTGT CAG

```

(2) INFORMATION FOR SEQ ID NO:1050:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 68 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1050:

```

GAATTCGGCT AAAGAGGCCT ACTTCTGGCT ATTTTCAAAT ATATAATATG TTATTGTAA    60
CTATACTC

```

(2) INFORMATION FOR SEQ ID NO:1051:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1051:

```

GAATTCGGCC AAAGAGGCCG GAATTGGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGCAA      60
GACTCTGTCT CCAAAAAAAA AAAAATTAA AAAAAAAA ATTTTTTAA AAATTTTANT      120
TAANGTAAAT TTAAAAATGT TCAGTGAAAT GGTAAGAAAA AAAAAAGAC GCACAAAATA      180
CCTTCATGTT TCTCATCTCT TTTCCCTTC AGATTCTGCC TTTCTCCAA TTCAGCTCTT      240
CTTTCCAGT CTTCAACCA ACCACCACGA CTCTCGAG      278

```

(2) INFORMATION FOR SEQ ID NO:1052:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 307 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1052:

```

CTCGAGGACC AAGGATGAAG AGCATAAGAA GATGAAGATT GTAAACTTGT ATAAAATTAT      60
CTTGGTGAGA AGACAAATTG TAAAGTAGAT ATTTGTAATC TTTTACCACT TTGGGGTTGC      120
TTTTTCCCG GAATTCATCA GAACTTTGAA TTTTTTTTT AAATGGGCTG TTTTAAATGC      180
AGGGGCTTTT CTTCCCTAGA AACCCAATTC TAAGCAGAAA AAGNAAAAAN ACACCAAAAA      240
TAAAAAACCC CCTCGTGCC GAATNTNGG CTTGCGGGGC CAAATCCGG CCTCTTGGC      300
CGAATTC      307

```

(2) INFORMATION FOR SEQ ID NO:1053:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1053:

```

GAATTCGGCC AAAGAGGCCG GAATTGGGCC CTCGAAGCCA AGAATTCGGC ACGAGGGCAG      60
TTAAGATCTG GGTGATTCTT TAGGGAAACG GCTGGTTGAG AGGCTTTGAT GGAATCCCAT      120
TCTCTGCTGT GGCCAGAAGG TGGTGCTAGA GGCCAGTCCC ACTTGGATGT GACCTGGCC      180
TCTGCCAGGA TTCAAACAC AAAGAACATT TGAAGTGGG ATGTTTGCTT TGAAGCAGCC      240
TGAAAAAAG TGAAAAGGAA ACCAAGATAA CTCTCTCTCC CTCCGCTGGC AAGGATCAAA      300
AATACCTTGT GCAGGGAAGC CCGAGCCTCG AG      332

```

(2) INFORMATION FOR SEQ ID NO:1054:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1054:

```

GAATTCGGCC AAAGAGGCCG GAATTCGGCC TCGAAGCCAA GAATTCGGCA CGAGGCCTCG      60
TGCCGCGCCG TTTTTCAC AGGGGGCAG TCGGGATTAT AATACACTGT      120
AGCAGTTGGC TGGGAAAAG TCTATCAAAT TCCATGACCA ATGGACTTT TCTCCACCT      180
GTAATATAAA TAAATATGT ACTGTTTCAT ACTGAATTTT TTCAATGCAT TGGGGTTCAA      240
CATAAAGGC ACAATAAAT AAAAATATCA TTAAATAAAC GGAAATTACA ATTTCAAGTT      300
TCATGTGGAG TTGTATCTCA CTGTTTGGTT ACTTTTCCA ATTTAATTG ACAGACTTAG      360
TAATAGCACA CAACTGTCCT ACCCTCGAG      389

```

(2) INFORMATION FOR SEQ ID NO:1055:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 213 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1055:

```

GAATTCGGCT AAAGGGTCTA CGAGGTCAGC AAGGACGCC AAGGAGACTC AGTCATGAAA      60
GGTGAAGTGC TCCTGTTTC CAGTGTGATT GTCCTGCTCC AGGTGGTATG CAGCTGCCCG      120
GACAAGTGT ACTGTCAGTC ATCTACAAAT TTGTAGACT GCAGCCAGCA GGGCTGGCC      180
GAAATCCCTT CCCATTCCCC TCGTCGCTC GAG      213

```

(2) INFORMATION FOR SEQ ID NO:1056:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 173 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1056:

```

GAATTCGGCC TTCATGGCCT AGCGATTCCA GGTTTTAAAT AGTTTGTAAT TTTCAGTTT      60
CTACAACTT TATCATCCAC TCGTGATTTT TTAATTAAAG CGTTTAAAT CCTTCTCTG      120
TTCAGCTGTT GATGCTGAGA TCCATATTA GTTTTATAAG CTCCCCCTC GAG      173

```

(2) INFORMATION FOR SEQ ID NO:1057:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 555 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1057:

```

GGTCATACTC TCTCATCCAG ACTGGAGTGC ATGGAGTGCA GTGGACCAT CTCGGCTCAC      60
TGCAACCCCT GCCTCCAGG TTAAAGCAAT TCCCCTGCCT CAGCCTCCCG AGTAGCTGAG      120
ATTACAGGCA CATGCCACCA TGCTGGCTA ATTTTGTAT TTTAGTAGA GACGGGGTTT      180
CACCATGTTG GCCAGGCTGG TCTGAACTC CTGACCTCAA GTGATCTGCT CACCTCAGCC      240
TCCCAAAGTG CTGGGATCAC AGGTGTGAGC CACTGCACCC GGCCTAGTTT CCATTTTCT      300
GTTGATATTT ACTTCTATTC ACTCATTAAG ACTATATTTT ATTTCTTTAA TATATTTTCC      360

```

CTTAGTTCTT TGAACATATT TATAAGAGCT ATTTTAAAGT ATTTGTCAGT TGAATCTAAC	420
ATCTTTTGGG GCCATTTTCT ATTGACTGCT TTTTCTTGA TGATGAGTCG CATTTCCTT	480
TTTGCCTATC TAGTAATTTT TAAATTATAT ACTGTACCTT GTGGATGTAT GGTAGAGACT	540
CTGGGGTCTC TCGAG	555

(2) INFORMATION FOR SEQ ID NO:1058:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1058:

GAATTCGGCC TTCATGGCCT AGAATGTTAG AAGGTGCCTG CCGAGGCGGG ACAGAGTGTT	60
CGCTCGCGCT GGAGAAGGCT CTGCTCAGCC CTGAGAGTCC CTTCTGCCC CACCGATACT	120
GGCACTTTAA CAAGGAAGCT GACCGCACAG TGTCCAGACG AATTGGCCCC CAGAAGATGG	180
GGAGTTCTGT CCTGCCCTTC TGTGTCTGCG TGACCTCACC CAGCCTAGGA GGGAGGTGCA	240
TTCAGGGTAG ATTTGCCTCT CATTCAAAGT TCTGGGGCTT TGGGTGGAAA ACAGCCAGCT	300
TGGCGCTGC TGGGGAGACT CGAG	324

(2) INFORMATION FOR SEQ ID NO:1059:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1059:

GAATTCGGCC TTCATGGCCT ACTTGATGCT GCAAAGAACA AGATGCGAGT GAAGATCAGC	60
TATCTAATGA TTGCCCTGAC GGTGGTAGGA TGCATCTTCA TGGTTATTGA GGGCAAGAAG	120
GCTGCCCAAA GACACGAGAC TTAAACAAGC TTGAACCTAG AAAAGAAAGC TCCTCTGAAA	180
GAGGAAGCAG CTATGAAGGC CAAAACAGAG CAGCTCGAG	219

(2) INFORMATION FOR SEQ ID NO:1060:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1060:

GAATTCGGGC CTTATGGCC TAGTATTTAT AGCCAAGGAA ACAGGGCTAT GAGTTTGTAC	60
TGTAGGCAGC AGTAGGGAGG GGGAAATGGA AGCAGGGGGG AGGGCTCTGC AGTAGTTCAG	120
TTGATGCATA CATAAGGCCT GAATTAGGGA ATTAGGAGAG TGATCATAGG TGTGGAAGG	180
AGGGGAGGGC TTCCAGGCAC ATTTGGTGTA AAATGGATAC AACTTGGTAA CCTGTACATT	240
GCTACCTTTG CACATTGGT TTCCCTGTC TCAAAGGCTC CCTCTTCTCG AG	292

(2) INFORMATION FOR SEQ ID NO:1061:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 386 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1061:

```

GAATTCGGCC TTCATGGCCT AAAGAAAACA AACAAACAAA GAGAAAACCC ATGAGCATTT      60
TAATTCTGAC TTTTCTACTT TTCTCCCTAC ATTTAGAATA CTGTGGCACT TTCTGTTATC      120
CAAAATGTGTC TCAGTCTCCA TATTTAAGGA CTGTGGGTGA AAAGCTTCTA CCTGGAATTG      180
AAGTGTCTTG GACAGGTCCC AAAGTTGTTT CTAAAGAAAT TCCAGTAGAG TCCATCGAAG      240
AGGTTTCTAA GATTATTAAG AGAGCTCCAG TAATCTGGGA TAACATTCAT GCTAATGATT      300
ATGATCAGAA GAGACTGTTT CTGGGCCCGT ACAAAGGAAG ATCCACAGAA CTCATCCCAC      360
GGTTAAAAGG AGTCCTCACT CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1062:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1062:

```

GAATTCGGCC TTCATGGCCT ACATGAAGCT GAATTACTCT CATCTTATAT CTCTCTGCAG      60
TGGCATATCC TGATGGTGAT TTCCTCTTTT TGTGCCTCAG TTTCACCCCG TATGGAATGG      120
GGATAAACAC TTGCGGCTGG GCATGGTGGC ATGTGCCTGT AGTCCCAGCA CTTTGGGAGG      180
CTGAAGTGGG AAGATTGCTT GAGGCCAGGA ATTTGAGACC AGCCTGGGCA ACATAGTGAG      240
ACACTCTCTC TACAAAAAAA AAAAAGAAAA AAAAATCAG ATGTGGTTGG TGCATGCTAC      300
TGAGGCGAAA CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1063:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 289 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1063:

```

GAATTCGGCC TTCATGGCCT ACTAGACCTG CCAAGCTTTC TTCCTTCATA CTACATATTT      60
CACAAAATTT GCTCGTCAGG TCTGCAAAAA TACCCTCCGG CTGCGGCAGG CAGCAAGACG      120
GCCGTTTGTT GCTATTAATT ATGCTGCCAT TAGGGCAGAA TGTAAGATGC TTTTAAATTC      180
TTAACCTTAT ATGTTGTGCT TCTGACCATT TTCTCTTTTC CTCTCTTTCC TTTTTTTTTT      240
GTTTGTGTTG TTGCAATAAA CATAAGTTCT TGTGTACAGC CCACTCGAG      289

```

(2) INFORMATION FOR SEQ ID NO:1064:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 288 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1064:

```
GAATTCGGCC TTCATGGCCT ACAGAGCTGA GAAATAATTC CCTGTGTGT TTATAAGTAA      60
GAGTTAAATC CCTCCCATG TAATGTAGCA CCAGATCGAA GTAAACAGAC TATGATTTC      120
GTGCTAGACA CAGCCTTAAG GCAGAAGAAA TTACACTGTC ATGCAAAGGA TATGTAGCTG      180
CTGCTATTTT GGTGCTTGAA TTCTTCGTTG TCACATAGTT GAAGGCAATC CAGATGAGGA      240
AGAGTGTTAA CCAACAAAA GAGAAAATTC CCTGCACATG GTCTCGAG      288
```

(2) INFORMATION FOR SEQ ID NO:1065:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 495 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1065:

```
GAATTCGGCT TTCATGGCCT ACTGGGAGCT ATCTTGCTA CCTTGAGTT CCTGAACAAT      60
GAATCCCAT TAATGAGCAG TCTTCAGTAT TAAAACCACT GTCTTGTCAC CTCATTTTGC      120
ATTACTGTCT TCCGTGGATG TTTCAGTTAC AACTGTAATG TTATTTATAG AACAAACATTA      180
ATCCATTAAA GCTAACCTAT TTTTCAATAT TTATGATAAT CTATGTACAT ATATTGTCTG      240
TCCATATGTA TTGTAAATA GGTGTATAT AATGTCAGGT TTGGGTCTTG GGTTCAGTG      300
TATATATTCC TGTAAGTTTC TTAAGTGCAT TTTGATGAAT TCACATTATG TAACTATAAG      360
AATTGTCCCA AAAGTACCTG TACAGAAAAT TGAATATTGA AAAATTGACA AATTGTGTAC      420
AAACACTAAA AAAAAGTTGT TTAATTGTA TTGCAATAA ACAACATCAA ATTTTTCAT      480
GAAATCTGCC TCGAG      495
```

(2) INFORMATION FOR SEQ ID NO:1066:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 507 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1066:

```
GAATTCGGCC TTCATGGCCT AAAGATTATA AAGGAAAGGG GGGTAGTTAA GATTTAGAA      60
TCAAGTTAAA TTTCAGAAAT TGGGGCAGTC AGGCATTTGT ATCTTTTAGG GCAACAAGTA      120
AAACATGTAG AGTGCTTGCT ATCCCACTTC ATAAAGCTTT TACCCAATCT TATTTCTAAA      180
CCTCTGTGCA TTCTTAGTGT CTCTCATTC TGAAACAGAA AATAAGGAAA AACATTTAAC      240
TTAGTTTCT AAAATCAGAT AATCCTAAC AAAAATGTTA GTCAGGGTCA CTAAAAAGTA      300
TTGCACATTT ATATAATAC AGTCCTTTTA AAATTTGACT TTTAAAAAAC AAAAGACTTT      360
GTACGATATT GTGTTTTAT TGCCTTTGCA ATATTTTAT AGTAGCCTTT ATGAAGTACG      420
TATAAGTGCA AGTTGTTGA AAAGGTGTTT TTATTAGTGC ACAATAGAAT TGTGAGGTTT      480
TCAATAGATG TCATGAGATT CCTCGAG      507
```

(2) INFORMATION FOR SEQ ID NO:1067:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 393 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1067:

```

GAATTCGGCC TTCATGGCCT ACTTATTTTT TTCTTTTAAA CAAATAAGCA CACATTCTTT      60
TTAAATAAAG TTTCTCTTCC CCAACCTAAA AGTAGTAATG CTAGAATTG AGCATAGCAG      120
AAAAATATTT AGGAAAATTA AATCCCAAAC AAGAGAGACC ATCTTGGACT GTGCTCACTC      180
GGGTGGAAAG TCGACCCAGG TGCCTGTGTG CTTGACAGAG GCGTGGCTGC ATCCGCGTAG      240
CTGACCTTCA GATGGACTGG AGTTAGCACA TTGTAGTCA TTTTCCAAC CATTCTTTCG      300
TATCTGAGGT ACGTTTTTGA CCTGTTT TAGTGTCACTC GCGATCTTGA AGCACACTCT      360
TTCATTTACT TAAATATTC CTGAGCACTC GAG                                     393

```

(2) INFORMATION FOR SEQ ID NO:1068:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 290 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1068:

```

GAATTCGGCC TTCATGGCCT AAGTAATGT GTCAGTGGAT GGAAAAGTTT AGAAAAGATC      60
TGTTGATAGTT CTGAGCAAC GTTTCCAG TATCTTTCA GTTTTGAAC ATCATGGTGG      120
TTGGAATTAC AGGAGCAGCT GTGGTAATAA CCATCTTAAA GGTGTTTTTC CCAGTTTCTG      180
AATACAAAGG AATTCTTCAG TTGATAAAG TGGACGTCAT ACCTGTGACA GCTATCAACT      240
TATATCCAGA TGTCCAGAG AAAAGAGCTG AAAACCTTGA TACTCTGAG                      290

```

(2) INFORMATION FOR SEQ ID NO:1069:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 319 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1069:

```

GAATTCGGCC TTCATGGCCT ACTCGACTCA TATTTTATC ATACATTTC AAGTCAGTTG      60
CTGATGTAA TCCCATTTCA ATGTGGGGCA GACTCTCGGG GTAATTTCAA AAAGATGTCT      120
CAACATGTT TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG      180
TGTGGAGACA GGGTCTCACT CTATTGCCA GGCTGGAGTG CAGTGGTGCC ATCATGGCTC      240
ACTGCAGTCT CGACCTCCCA GACTTAAGCA ATCTTCCCA AATAGCTGGG ACTCCAGGGG      300
CACCCCACTA CAACTCGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:1070:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 392 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1070:

```
GAATTCGGCC TTCATGGCCT ACTTCTAAAT GGCAACAGT TGTCTTGAAG GCACTGTCTT      60
TTTCTACCTA GATGTTGGGT GGAAAAAAGC TGCCTTTTAT ATAGAAGTTC      120
TTGGGAATAT TTCTCATATA GTGAGATGAA CAGAATGCAA AAGTTTTCTT CCTGCAGGAT      180
CTCCCAAAAT CCTTCTTGGC TTGAATTTT CTCTCACTT TTTCTTTTGA AAAGCTTTGT      240
TCCTTTTGCA CCTTGGAATA ATAAGTCTTG TTTGTCCTGA CAGCAGAGTG CAAGCATCTA      300
TTGCATCAAA ATTCCCAAGT GGAATAGAAA ACCAATGGTC CTTTCTGAA .TTTCGTTAGC      360
AGTAGCAACA AACATTCAT TATAACCTCG AG                                     392
```

(2) INFORMATION FOR SEQ ID NO:1071:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 421 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1071:

```
GAATTCGGCC TTCATGGCCT ACACAATGGG AATCCAAGGA GGGTCTGTCC TGTTCGGGCT      60
GCTGCTCGTC CTGGCTGTCT TCTGCCATTC AGGTCAATAGC CTGCAGTGCT ACAACTGTCC      120
TAACCCAACT GCTGACTGCA AAACAGCCGT CAATGCTTCA TCTGATTTTG ATGCGTGTCT      180
CATTACCAAA GCTGGGTTAC AAGTGTATAA CAAGTGTGAG AAGTTTGAGC ATTGCAATTT      240
CAACGACGTC ACAACCCGCT TGAGGGAAAA TGAGCTAACG TACTACTGCT GCAAGAAGGA      300
CCTGTGTAAC TTAAACGAAC AGCTTGAATA TGGTGGGACA TCCTTATCAG AGAAAAACAGT      360
TCTTCTGCTG GTGACTCCAT TTCTGGCAGC AGCCTGGAGC CTTTATCCCT ATACGCTCGA      420
G                                     421
```

(2) INFORMATION FOR SEQ ID NO:1072:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 335 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1072:

```
GAATTCGGCC TTCATGGCCT AATCGGTCAC TGATAGTATG TATTTCTTTA GTAAGAATGT      60
GTAAATTA CAATGATCTT TAAAAAGAT GATGCAGTTC TGTATTTATT GTGCTGTGTC      120
TGGTCTTAAG TGGAGCCAAT TAAACAAGTT TCATATGTAT TTTTCCAGTG TTGAATCTCA      180
CACACTGTAC TTTGAAAATT TCCTTCCATC CTGAATAACG AATAGAAGAG GCCATATATA      240
TTGCCTCCTT ATCCTTGAGA TTCACTACC TTTATGTTAA AAGTTGTGTA TAATTGTTAA      300
AATCTGTGAA AGAATAAAAA GTGGATCCCC TCAGAG                                     335
```

(2) INFORMATION FOR SEQ ID NO:1073:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 362 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1073:

```
GAATTCGGCC TTCATGGCCT ACAAAAATAG GCACAGTTTC AGATGCTTCA GCATATGAGG    60
CATGGATACT TCAATCATTT GCAAAGGGTT CTGCTCAGTA GACTGAATGG AAAAGATGGT    120
CATTGCTCTT TAATGTAATT TTGCAGCTCT CATCAAAGAA AATATCTCCA TGAAATTTAT    180
TGGTAACTGT TTATCTTTGA TCAGTGCAAA CTGAAGTCAA ATATACAAGG TAAACACACA    240
TAAAGATAAG TTCACACATT TCTGTGAATT TTCTAAATGT ACACACTTCT GCAAATTCTC    300
TAAATTCACA AATAACAAAT TTGCATGCAT GCAAGCATAT GTGCACATGT GCACACCTCG    360
AG
```

(2) INFORMATION FOR SEQ ID NO:1074:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 612 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1074:

```
GAATTCGGCC TTCATGGCCT ACCCAGGTGA TCAATGTTTT CAATGCGATC AGTAATAACC    60
ATGTGCTCAT GAATCAGATA GGAAGGAGC AAATAGGTTT CAGCCTTGAT GTTAATAAGT    120
AACTCCAGTA GGTTCCTGGG TGGCATAACA ATGGAAGTGT TCAGAGGGAT CACATAGCAC    180
TTATCCAGGT TAAGATCTAA ATAGGCTGTA AGTTTCTTGT TAAAGTCATG AACAAATGTTG    240
GCAGGATCAC TATCTGCAAA CTCTGGGACA GGCACACTGA TAAATTCAAC TTCTCTTCTT    300
CAAAGATTTT AATATTTTCT TCAATTGTCT GGTAGAGAGC AGCTGGGGCA TCTGCAGAGG    360
GCTCATTTAA GATGACATCA TCTTTGATGT ACTTTATTCC ACAGTAGTAC ACGTCATCTG    420
GTTGAAGTGC AAAATATTTG TACAAGTATG CTCCTCCTAG AATAACACCT GCAAGCATAA    480
ATGCTAGTCC AAAGCACATG CACCACCACC ACCCGGCTAA TTTTGTACT TTTAGTAGAG    540
ATGAGATTTT ACCCTGTTGG CCAAGATGGT CTTGAACTCC TGACCTCAAG TGATCCGGCC    600
ACACCACTCG AG
```

(2) INFORMATION FOR SEQ ID NO:1075:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 252 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1075:

```
GAATTCGGCC TTCATGGCCT AAGTTTGTGG TCCTCTGAGA ATTCTCTGAA GGAGGAAATG    60
GGTTGACCTA TTTGGTTGCT ATGAAGTAAA AACAATCTTG TTTTCATTTT TTAGTGAACA    120
TCTGGGTTGC ATTTATTATT TCACATTCTG GAGATTCTGT AAAACCACAA TTTGATAATA    180
TGAGGGTTCA TCAAAGCGGT AATTATTGAG CTATTTTAT AGTTGATTCA AGAATTAGGG    240
TGGCGACTCG AG
```

(2) INFORMATION FOR SEQ ID NO:1076:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 151 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1076:

```
GAATTCTAGA CTGCCTCGA GTGTGATACC AGCAGCTATG AAGCAAAC TG TATTAACCAA    60
GTCTTTTATT TTCTGTGTTT TGATGCATGA CTTTCATGGC CTTGTCAACC CTAGAGACCC    120
TGCCCCCTCC ATAGCTAGCG AACGTCTCGA G                                     151
```

(2) INFORMATION FOR SEQ ID NO:1077:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 542 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1077:

```
GAATTCGGCC TTCATGGCCT AGGAAGTAGT CTAAAAAATT AACAGTTATG GTTTTAATAG    60
GATCTGAAAG ACAATCTTTA AAGAAATGGG AGAAATTGGG GGTATCAGTG AACCTATACC    120
AACCTCTCTT TGTACATAAA TATGGTGATG TAGCTAGATA TAAAAATCAG TGTCTTACTG    180
GCACCATTTA CAGTTTAGAA AACAACTTTT TTCTTAAAAA TGCCCATCTG ATTTCTATTT    240
TTAGGAGCTA CTGGGATTTG TATGTATTTT TTCTACGTGA AAATATATGT ACTCTTCACT    300
TTGTTCAG TACTATAATT GCTCATGCAC TCTTTCTCCC CTTTGAGAAC ATTCAGTGAA    360
ATACAACTTC ATCAAAGATT TGCTCAAAGG AGAAGAATCG CATGAGTGTG AAAAGTAGAT    420
GCTCGTAGCC AGAACAGAAA AGGTTACACA TGATCATGGC ACAGAAGATA GGAGGTTTGA    480
CTTGGTGGGC CATAATGTTT ATTATCCTTT TTGAAATAAC AGGGACCAGC AGCACTCTCG    540
AG                                     542
```

(2) INFORMATION FOR SEQ ID NO:1078:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 574 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1078:

```
GAATTCGGCC TTCATGGCCT AGGTTGCCAT TACTTGTGAT GCCTCTGAAT GTGGAGGCTG    60
ACTCTCCCGT CTCTCTGTCC CTCCTACCCC ACGGGGCCGC AGCAAAGCC ATCCTGGGCC    120
TTCGACTGGG CCATGTCTTC AGGAAGATTC CTGAAGAGGA GGGCCCGAAA TACCTGCCTT    180
TATAGTTTCC CAGAGTGCCC TAGAACAATC TTAGATACAT ATTTTAA A CAAGTAGGAC    240
TCCACCTTAT TTTCTCCAAT AGTCCCCAAG CAGTACAGGT CACTTGAAGA CATAAACATT    300
CTTCTTGGTT GAGGGATCCA CGCCCTTGTT TCAGAAATGA CACCACAGAA GGCTGTGAGC    360
TCCAGGAGCA TCGTTGGGA TGTCCGGATG ACCGGGGTTT AAAGGTTTTC CTATTCTCGA    420
TAAAGCCTGT GCGCACTGTA CGGGGAGTGG GGTGAAGCG TGTTCTCTAC ATAGGCAACA    480
```

CAGCCGCCTA AGTCACAAAG TCAGTGGTCG GCCGCTTCGA CCAACATGTG GTGAGCATTC 540
CACGGGCGCA TGAAGTCTGG GTGCTGTGCT CGAG 574

(2) INFORMATION FOR SEQ ID NO:1079:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1079:

GAATTCGGCC TTCATGGCCT AGGGGCCAGG CGGCCGCCGC GAGTCTGGTA TCCTGAGCTT 60
CGTGAGTTGA GCGCTGCTGC TCCGCGGTGG AGTCACCGCA CCGCTCCCGG GATCATGGTG 120
TTCTACTTCA CCAGCAGCAG CGTTAATTCA TCTGCCTACA CTATTTACAT GGGAAAAGAT 180
AAATATGAAA ATGAAGATCT GATCAAGCAT GGCTGGCCTG AAGATATCTG GGAGAGAATA 240
TAGAAGACAT CCCAAAGGAA GTGCTGATGG ACTGTGCGCT CGAG 284

(2) INFORMATION FOR SEQ ID NO:1080:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 359 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1080:

GTGAACACCA GAAAATACCC TGCAATTCAG CAGAACCAAA ATCCATACCT GCCCTTTCAA 60
TGGAAACACA GAAACTTGGT TCAGTTTTGT CTCCAGAATC GCCAAAACCT ACTCCTCTTA 120
CTCCCTGGA GCCTCAGAAA CCTGGCTCTG TTGTTTCTCA TGAGCTACAG ACACCTCTTC 180
CTTNTCCTGA GCCTTCAAAA CCTGCCTCTG TTTCTTCTCC TGAACCTCCA AAATCAGTCC 240
CTGTTTGTA GTCTCAGAAA CTGCCCCCTG TTCCTTCTCC AGAACCACAG AAACCTGCCC 300
ATGTATCTCC TGAGTCAGTA AAGGNTACTA TTNGTAATCC CAAACCCAG ATTCTCGAG 359

(2) INFORMATION FOR SEQ ID NO:1081:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 474 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1081:

GCCCCGCAGA TGGGAAACGC ATCATATTCT GATTCTTACC TGGAAGGAAT TTTGTTGAAA 60
GGGGTTTTCA CCTGTGAGCC TTGGTCTGTC TCGGTAGGGT GGTCAACTTC AGTGGACTGT 120
GGTTGGTTTC AGAGCGCCTG GCTGAGGAGT TCCACTGAGG GGAGCACTGG AGCAGCCCTT 180
TGGCAGAGGC TGAGGAGGGA GATGGACCAG CCCACGCCTG GCACCTGGCT CCATGGCATA 240
AGGAAAGGGA GATGCTGGCC TCTGTCTCC TGCTGTCTTT TCCTGTTTCT GTTTGCGTTT 300
GACTTAGTAG CAACCGACAG AGTGGCAAGG GATTGGTCT TCAGCAGTAG ACATCCTTCC 360
ACCCCTGCCC TCAGCCAAGT CTCTTGCTGC CATGCCAATG CTATGTCCAC CCTTGCCCT 420

CGGCCCAAGA GTGTCCAGCG GTGGCCCACT TTTCTCTCCC ACCACAACCT CGAG

474

(2) INFORMATION FOR SEQ ID NO:1082:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 505 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1082:

GAATTCGGCC TTCATGGCCT AATGTGTGTG GCACAAAGAA GAAAGTGGAC TCTACACTGT	60
GTTAGTTAGG AAAACCAGAA ATTGGGCCAA ATTGCCTGTT TAGTGGGAGA GATANCTTTT	120
GAGAGCTGTG ATCCCGCTGG TGTGGCTGGC TCTGGGCAGA TATTTGTATC TGAAATGACT	180
CATGCTGTGG GACCCCTCCT GAGATCTAAC ACTTACAGTG GTTGATCAG AAATTGCACC	240
ATGCTTGCCA AGCAACTTTT GGAATAAAG TTGCTGCCCA CGTATATCAG GGAAGAATA	300
TATATATATA TATATATAGT ACCTATCTTA GCATCTGATT TGTATGACCA TTACTTCAAT	360
GTAATAAAT AAATTGGCTT TCCAGCTTAA ACTTCAATTT CTGTATATT ATATGATCAT	420
GAGACAACCT CCCTGGGCTG ATCAACAGCA GGACGCTAAA AAGATTGAGT ATCTGAGTCA	480
GGAAGGTAGA GGGCCAAACC TCGAG	505

(2) INFORMATION FOR SEQ ID NO:1083:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 481 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1083:

GAATTCGGCC TTCATGGCCT ACTACTATTC AGAGACAACA GTGACACGGA CCTATGTGAT	60
GCTGGCCTTA GTGTGGGGAG GTGCCCTGGG CCTGGGGCTG CTGCCTGTGC TGGCCTGGAA	120
CTGCCTGGAT GGCCTGACCA CATGTGGCGT GGTATTATCCA CTCTCCAAGA ACCATCTGGT	180
AGTTCTGGCC ATTGCCTTCT TCATGGTGTT TGGCATCATG CTGCAGCTCT ACGCCCAAAT	240
CTGCCGCATC GTCTGCCGCC ATGCCAGCA GATTGCCCTT CAGCGGCACC TGCTGCCTGC	300
CTCCCACTAT GTGGCCACCC GCAAGGGCAT TGCCACACTG GCCGTGGTGC TTGGAGCCTT	360
TGCCGCCTGC TGGTTGCCCT TCACTGTCTA CTGCCTGCTG GGTGATGCCC ACTCTCCACC	420
TCTCTACACC TATCTTACCT TGCTCCCTGC CACCTACAAC TCCATGATCA ACCCTCTCGA	480
G	481

(2) INFORMATION FOR SEQ ID NO:1084:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1084:

GAATTCGGCC TTCATGGCCT ACCATTTTAA TTAAACCCAA ATCCATGGAA AATATCATGG	60
---	----

```

AAATGAATAA GCGTCTAACA GAAGAACAAG CCAGAAAAAC ATTTGAGAGA GCCATGAAAC      120
TGGAACAGGA GTTTACTGAA CATTTCACAG CTATTGTACA GGGGATACG CTGGAAGACA      180
TTTACAACCA AGTGAAACAG ATCATAGAAG AACAACTCTGG TTCTTACATC TGGGTTCCGG      240
CAAAAGAAAA GCTATGAAAA CTCATGTTTC TCTGTTTCTC TTTTCCACAA TTCCATTTTC      300
TTTGGCATCT CTTTGCCCTT TCCTCTGGAG TCTTCTTGA GACTGATTT CATGTTGAAT      360
TGATATCCAC ACATCATGGT CATCTCGAG                                     389

```

(2) INFORMATION FOR SEQ ID NO:1085:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1085:

```

GCGATTGAAT TCTAGACCTG CCTCGAGACC GCCTACGAAT GGAAATCCAT AAGATGAGG      60
CTTGGCTCTC TGAAGTCGAA GGCAAAACAG GTGGGAGAGG AGACAGAAGA CATAGCAGTG      120
ACATAAATCA TCTTGTAACA CAGGGACGAG AAAGTCCTGA GGGAAATTAC ACTGATGATG      180
CAAACCAGGA AGTCCGTGGG CCACCCGAGC AGCATGGTCA CCACAATGAG TTTGATGATG      240
AATTTGAGGA TGATGATCCC TTGCCTGCTA TTGGACACTG CAAAGCTATC TACCCTTTTG      300
ATGGACATAA TGAAGTACT CTAGCAATGA AAGAAGGTGA AGTACTCGAG                                     350

```

(2) INFORMATION FOR SEQ ID NO:1086:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1086:

```

GCTCCACCAG CTACTGAGAA AATGGCCTGT AAAGATCCAG AAAAACCCTT GGAGGCCTGT      60
GCCTCAGCAC ATGTGCAACC CAAGCCTGCC CCTGAAGCCA GTAGCCTAGA GGAGCCCCAT      120
AGCCCAGAAA CAGGGGAGAA GGTAGTAGCA GGAGAGGTAA ACCCACCCTT TGGCCCTGTG      180
GGGGACCCAC TGAGCCTCTT GTTTGGGGAT GTGACATCCC TGAAAAGCTT TGATTCATTG      240
ACAGGTTGTG GTGACATAAT AGCAGAACAA CTCGAG                                     276

```

(2) INFORMATION FOR SEQ ID NO:1087:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 295 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1087:

```

GCAGAGACTT AAAGGGTTAA TAAAAATTGT AAAGCCAGCA GAGATTCCAG AACTAAAAAA      60
GACTGAAACT CAGACTACAG GTGCAGAAAA CAAAGCTAAA AAGCTTACAT TGCCTCTATT      120
TGGTGCCATG AAAGGAGGAA GCAAATTCAT ATTAAAAACT GGAACAGTAG GGAAGTTACC      180

```


CCCCAAGCGT CCAGAACTCC CTCCAACCTCT AATGAGAATG AAAGATGAGC CTGAAGTAGA 240
AGAGGAGGAG GAAGAGGAAG AGGAAGAAGA GAAAGAAAAG GAGGAGCAGC TCGAG 295

(2) INFORMATION FOR SEQ ID NO:1088:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1088:

GAAATGAGGG TCCCTGAAGA AGCTCTTAAG CATGAGAAGT TTACCATTC A GCTTCAGTTG 60
TCCCAAAAAT CTTCAGAATC AGAATTATCC AAATCTGCAA GTGCCAAAAG CATAGATTCA 120
AAGGTAGCAG ACGCTGCTAC TGAAGTGCG CACAAAAC TA CTGAAGCACT GAAATCCGAG 180
GAAAAAGCCA TGGATATTTG TGCTATGCC CCGTGGTACTC CATTATATGG GCAGCCGTCA 240
TGGTGGGGGG ATGATGAGGT GGATGAAAA AGAGCTTTCA AGACAAATGG CAAACCTGAA 300
GAAAAAAACC ATGAAGCTGG AACATCAGGG TGCTTCGAG 339

(2) INFORMATION FOR SEQ ID NO:1089:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 433 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1089:

GAATTCGGCC TTCATGGCCT ACTCAAGAAT ACAGGTCTTA CTCGTATAGT CTTTGAACAA 60
TAGGCTGTGT GACTAAAAGA GAGACACAAT CAATTGCTTC CCAGTCAAGA AGCCAGAAAA 120
GCTTCAAAC CTTTCCCCCT CCTACTCCT TGCCACCGCA CCTAAAAAAG AGAGAAATCT 180
TTTAAGTGTT TAAATCTGT AGGAGTCTTA TGAAGAAGCA GCTTTATGTG TATTCTTTAT 240
GGCATAATAT TAATGCATGA AAATCTGTTG CTTTTTAAA AATTGTGGCA AAATATACAT 300
AACATAAAAT TTATCATTTT AGCTATTTT AATATACAAT TCACTAGCAT TAAGTATTAA 360
TACATTACA GCACCATTCG AACCATGGCC ACCATCATCT CCAGAACTTG ATCTTCTTCA 420
ACGCCCACTC GAG 433

(2) INFORMATION FOR SEQ ID NO:1090:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1090:

GACTGGGTCC ATGGGAGCAA GATTAGTGGC TGCTAAACTT GAACCGAAAA GCTTCAAACA 60
TACCCATATA GATAAACCAG ACTGCTCAGG GCCCCCCATG GACATAAGTA ACAAGGCTTC 120
TGGGGAGATA AAAATTGCCT ATACTTACTC TGTTAGCTTC GAGGAAGATG ATAAGATCAG 180
ATGGGCGTCT AGATGGGACT ATATTCTGGA GTCTATGCCT CATACCCACA TTCAGTGGTT 240

TAGCATTATG AATTCCCTGG TCATTGTTCT CTTCTTATCT GGAATGGTAG CTATGATTAT 300
GTTACGGACA CCACTCGAG 319

(2) INFORMATION FOR SEQ ID NO:1091:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1091:

GTGCAATTG AGCACATCAT TGAAACATT GTTGCTGTCA CCAAAGGACT TTCAGAAAAA 60
TTGCCAGAGA AGTGGGAGAG CGTGAACTC CTGTTTGTA AACTGAGAA ATCGGCTGCA 120
CTTCCCATCT TTTCCTCGTT TGTCAAGCAAT TGGGATGAAG CCACCAAAAG ATCTTTGCTT 180
AATAAGAAGA AAAAAGAGGC AAGGAGAAAA CGAAGAGAAA GAAATTTTGA AAAACAAAAG 240
GAGAGGAAGA AGAAGAGGCA GCAGGCTAGG AAGACTGCAT CAGTTCTTAG TAAAGATGAT 300
GTGGCACCTG AAAGCGGTGA TACTCGAG 328

(2) INFORMATION FOR SEQ ID NO:1092:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 109 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1092:

GATCATGAAG TCCATCATCC CAGTGGTCAT GGCTGGCATC ATCGCCATCT ACGGCCTGGT 60
GGTGGCAGTC CTCATCGCCA ACTCCCTGAA TGACGACATC AACCTCGAG 109

(2) INFORMATION FOR SEQ ID NO:1093:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1093:

GAATTCGGCC TTCATGGCCT ACTGGAATC ATAAGTCTAA ATGGTTCTAT GAGTCTAAAA 60
TTAAAGTGTT AGCAGGGCTG GGCTTCCTTT GGAAGCTCTA GAGAATGATC TGTTTTCATA 120
CCTTTCCAG CTTGTATGAG CTGACTACAT TCCTTAGTCTC ATGGCCCTGC TGCCCACAGC 180
TTCAAATGAG ACAACACCAA GTTGAGTCTT CTTTAGATCA CATCAATTTA AATCTCTTAC 240
TATTCATATT TCCTTGTGAC TCTCTATGC ATCCTTCCTT CTCTTCAAAG GATCTTTGTG 300
ATTATACTGG GCCCTCTGAA GAATCCATGA TAATCTTATC TCAAGGTGCT TAAGTTAATC 360
ACATTTACAA GATCTCCTTT TCCTCGAG 388

(2) INFORMATION FOR SEQ ID NO:1094:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 461 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1094:

```
GAATTCGGCC TTCATGGCCT AGGTGGCACA TGCCTGTGGT CCCAGTTACT CGGGAGGCTG      60
AGGTGGGAGG ATTGCTTGGG CCCGGGAGGT CAAGGCTGCA GTGAGCCGTG ATCTTGCCGC      120
TGTACTIONCAG CCTGGTGATA GCGAGACCCT GTCTCAAAAA AATGCTTTTA GGGAAATTAA      180
TATGTCCTGT GCCTGTTTAA TCATTGAAAA CATTTTAATA TTTTCAGAGC CATAGAGGGC      240
AGTGAAAAAC AGAGTAGCAG AATTGATTAT ACCAGTACTA TTTATCCAAT GGCTAATACA      300
AATAAGACTC TCAGGGATAA TTCACACGTG CTTCACAGAA CACTAGATGG CACCAATTAT      360
TTAGGATTCG GACTACCTCA GGAACAGCT GTCTTCATTG AACAAATATT TATTAATAAA      420
TGAACAAAAC AAAAATATCT GTCATGTGG AGCAGCTCGA G                                461
```

(2) INFORMATION FOR SEQ ID NO:1095:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 317 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1095:

```
GAATTCGGCC TTCATGGCCT AAACCTATGC AGATGCCTGT GATGAGTTCC TGGATCCCAT      60
TATGAGCACA CTGATGTGTG ACCCTGTGGT GTCGCCATCT TCCAGAGTCA CTGTGGATAG      120
ATCCACCATT GCAAGACATT TGCTCAGTGA CCAACACAGAT CCCTTTAACC GTAGTCCCCT      180
CACCATGGAC CAGATCCGGC CAAACACAGA ACTAAAAGAA AAAATCCAAC GGTGGCTTGC      240
AGAGAGGAAA CAACAAAGG AGCAACTGA ATAGATACTG TGAACCTAAC AAACCAAAAC      300
CAACCCGAGA TCTCGAG                                317
```

(2) INFORMATION FOR SEQ ID NO:1096:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 360 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1096:

```
GCTGCAGCCA ACGCGCAGCT CCACTGGAAG AGGATGGAGA ACCTCAAGGA GGAGGAAGAT      60
GACGACTCCT CCACAGCCTC AGACAGCGAT GTTCTCATCC GGGACAATA CGAGCGGGCA      120
GAGAAGCGGC CCATCCTGTC TGTGCAGAGA CGTGGATCTC CCAACCCGTT TGAATCACA      180
GACCGGGTGG AAATGGGACA AATGGCCTCC ATGTTCTTCA ATAAAGTGGG GGTCAACTTG      240
TTCTATTCTT GCATCATCGT TTACCTGTAT GGAGACCTCG CCATCTATGC TGCTGCCGTG      300
CCCTTCTCCC TCATGCAGGT GACCTGCAGC GCCACTGGCA ATGACTCCTG GCGGCTCGAG      360
```

(2) INFORMATION FOR SEQ ID NO:1097:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 311 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1097:

```
GAATTCGGCC TTCATGGCCT AGTGAGCCAC CGCACGGGGC CTAACGATGA TGAGAATTTG      60
ATGTGACATC TGCAGGATCC CCAGCTAGTC AGCAGCATCT AGAGGGCTAG AACTCTGGCC      120
AGCTGACTGG GCCTTTTGCT AACTGTTTC TGTCCCTCT GTGCCGGGT GTCAGTGAGC      180
TTTGGGGAC AGGCTGGTCT GTCGTGCCTT CAGCTCAGGG AATGTGGCTC CCGAGCATAG      240
GGCTGGACTG AGAGGCGTTA GGTGAGCCAG AGAAGGCCTC AGACACAGGG CTTAGAGAGG      300
GCTCCCTCGA G                                     311
```

(2) INFORMATION FOR SEQ ID NO:1098:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 436 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1098:

```
GAATTCGGCC TTCATGGCCT ACCTGCAGCT CTACAATATA TTTTCAAAC GCTTGATATT      60
GAGAACAAAG GATACCTGAA TGTCTTTTCA CTTAATTATT TCCTTAGGGC CATACAGGAA      120
CTAATGAAAA TCCATGGACA AGATCCTGTT TCATTTCAAG ATGTCAAGGA TGAATCTTT      180
GACATGGTAA AACCAAAGGA TCCTTTGAAA ATCTCTCTC AGGATTTAAT CAACAGTAAT      240
CAAGGAGACA CAGTAACCAC CATTCTAATC GATTGTAATG GCTTCTGGAC TTACGAGAAC      300
AGAGAGGCTC TTGTTGCAAA TGACAGTGAA AACTCTGCAG ACCTTGATGA TACATGATCT      360
CTGAAAGACT AGACTGTCTT ATATTATGAG ATACTTGAAT GCTGCATGTA AAGCCTTAA      420
AGCAAAAAAC CTCGAG                                     436
```

(2) INFORMATION FOR SEQ ID NO:1099:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 291 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1099:

```
GAGAAGATGC AAGTGGAACA GGAGGAACCA CATGTTGAAG AGCAACAGCA GCAGACACCA      60
GCAGAAAATA AGGCAGAGTC TGAAGAAATG GAGACCTCTC AAGCTGGATC CAAGGATAAA      120
AAGATGGACC TACCACCCCA AGCCAAGAAG GCAAAAGTGA AGACCACTAC TGTGGACCTG      180
CCAATCGAGA ATCAGCTATT ATGGCAGATA GACAGAGAGA TGCTCAACTT GTACATTGAA      240
AATGAGGGTA AGATGATCAT GCAGGATAAA CTGGAGAAGG AGCGGCTCGA G               291
```

(2) INFORMATION FOR SEQ ID NO:1100:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 101 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1100:

```
GAATTCGGCC TTCATGGCCT AGTCATTTTA TAGGTTAAAA AAAGGTCAAA TTGTGACAAT    60
TTCATATGGT ACAATATAAA ATTATATTAA ATATACTCGA G                          101
```

(2) INFORMATION FOR SEQ ID NO:1101:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 492 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1101:

```
GAATTCGCCT TCATGGCCTA AGAAATACAT AGATCAAGTA AAACCTCAAC TACTGTAGCT    60
GGAATTGTA AACTAAGTTT GTAAGACCTC TTTATTTC TATGGAGTTA TTCTTTAATT    120
TACAGTTTAT TCTGTAAGTT GGAAGTAAA ATAGAGAAAA TAATAAATCT AGATGTTCTC    180
AGTGTCTTAT TCAGGAACCT TTTATCCCTC CTCCTAAGG AATTCCCACT GTGACTTTAA    240
AATAGAACTA AATTACTTGT GTGCATGTAT ATGCTCTGTAT TTTTACACA CATGCAAAAA    300
TATACATTGG GGCACGTGT GTGAGAGATA TGAATGTGTG CTTATATAAA AATAGATAAA    360
GGTAACCGAA TGTATTGTAG AAACATGATT TATTTAGTTG AGGGTATTGG AGTTACTTTC    420
TCATTGTCTC TGTGTATATA ATACACCAA TTAATCATTA TGTTATCTTA TGTTAAAAGG    480
CTAGCTCTCG AG                                          492
```

(2) INFORMATION FOR SEQ ID NO:1102:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 343 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1102:

```
GAATTCGGCC TTCATGGCCT AGGCCTGCCT TAATACTCTT AATTATAGAA ACAATCCTTA    60
ATTAATAAAC AAGTCCTTTC ATTGGAAAAA GAACTAATAC ATTTTGTCT CTCAGTCAAA    120
ATTCTGTTT TGTGGTTAGA GTAATAAAAT GGTAACACCT AGGGTCTGCC ACGATCATGG    180
TTCTCACTCT GGATTCATTC CCTACCACAT CCTTATTTC CTCCTCTCC CCATTCCCTC    240
ACTCACCTC CTCCTTTCCT TCCCTCACTC ACCCTCCTCT TCCCCATTCC CTCACCTACC    300
CTCCTCCTT CTTCCCTCA CTCACCTCC CCCTTCCTC GAG                          343
```

(2) INFORMATION FOR SEQ ID NO:1103:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 282 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1103:

```
GAATTCGGCC TTCATGGCCT AACCGGGCAA AAAAAAAAAA AAATCTTAA AGCACTAACT    60
TACTATCAAA TCTCAAGAAA CAGAAGCAAT TTCAAAAAAT CAATACTATC CTTTGGTCA    120
GTAAACATTT CTTCAATCCT AATGTATGAG AACATAAGG ACATTTTAGC TCCTTTACTC    180
TTCCTTCATT TAGTGACTTC CACATTCTC TCACCATTTT TCCAGCCTCT GGGTGTGGTT    240
CTGATGAACC TTAACCTGA AAGGCACAGG CCAGAACTCG AG                                282
```

(2) INFORMATION FOR SEQ ID NO:1104:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 205 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1104:

```
GCGATTGAAT TCTAGACCTG TCTTACGCTT CCCTTCCTAA GCCTTTGTCT ACTCTGCTTT    60
GTCTGCTTTT ATGCTTCTCT CTCTTTTGTC TGAAGTGGTC TCTGTCCTCG TCCATGCTTC    120
AAGTCCTAAT TCAAATGCCA CTGTCTTAT GAAGGGCTCC CTGATTGTTT CAACCAAAAT    180
AAGCTTTTAT TCCTTTGAAC TCGAG                                205
```

(2) INFORMATION FOR SEQ ID NO:1105:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 249 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1105:

```
GAATTCGGAC TTCATGGCCT ACGTTTTTAT TACAAATATT ACATTAACT AAAGCTCACA    60
ACTGTACTA TGCATCAGGA ATTAACAGTC ATTTCTCATT TGTGTTATTC TCCTATTGTA    120
TCACATATAG TGAATATCTC TTTATGGGTT AAATATCAGT TTCTTGCCCA GAATTCAAGA    180
TCTGCCCTTA ACNAATCCTA CTTCTCCAG TACCCTTACA GCACTCCTAC CCTACTAGTA    240
ACCTTCGAG                                249
```

(2) INFORMATION FOR SEQ ID NO:1106:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 237 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1106:

```

AATTCTAGAC CTGCCTCGAG ATTGTCTGCC AGTTTAATTC TTTAAACTC AGTTTAGCTG      60
TCCTTTTCTT TGGAACTT TCCCTAATCT TCCCCACCAC CTGTTCATCA ACATATATAG      120
AAGCACATTT ACTCTCTCAT TCTCTCTCTT TCTCTCTCCA AGTCTATGTT AGGTGTTTAA      180
GCGTTTATCA TAGGTTTATG TTTACTTATC TCCCCACTAG TCTATGAAAT CCTCGAG      237

```

(2) INFORMATION FOR SEQ ID NO:1107:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1107:

```

GATTATTAT AAAGCTGCAA AGAAGCTGTT GCACTCAGGA ATGAAAATTC TTAGCCAGGA      60
AAGAATTCAG AGCCTGAAGC AGAGCATAGA CTTTCATGGCT GACTTGCAGA AAACCTCGAAA      120
GCAGAAAGAT GGAACAGACA CCTCACAGAG TGGGGAGGAC GGAGGCTGCT GGCAGAGAGA      180
GAGAGAGGAC TCTGGAGATG CCGAAGCACA CGCCTTCAAG AGTCCCAGCA AAGAAAAATAA      240
AAAGAAAGAC AAAGATATGC TTGAAGATAA GTTTAAAAGC AATAATTAG AGAGAGAGCA      300
GGAGAGCCTC GAG                                     313

```

(2) INFORMATION FOR SEQ ID NO:1108:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 467 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1108:

```

GCGAGAACAC CATCACCATG ACAACCAGTC ACCAGCCTCA GGACAGATAC AAAGCTGTCT      60
GGCTTATCTT CTTTCATGCTG GGTCTGGGAA CGCTGCTCCC GTGGAATTTT TTCATGACGG      120
CCACTCAGTA TTTCACAAAC CGCCTGGACA TGTCCCAGAA TGTGTCCTTG GTCACCTGCTG      180
AACTGAGCAA GGACGCCAG GCGTCAGCCG CCCCTGCAGC ACCCTTGCCT GAGCGGAACT      240
CTCTCAGTGC CATCTTCAAC AATGTCATGA CCCTATGTGC CATGCTGCCC CTGCTGTTAT      300
TCACCTACCT CAACTCCTTC CTGCATCAGA GGATCCCCCA GTCCGTACGG ATCCTGGGCA      360
GCCTGGTGCC CATCCTGCTG GTGTTTCTGA TCACTGCCAT CCTGGTGAAG GTGCAGCTGG      420
ATGCTCTGCC CTTCTTTGTC ATCACCATGA TCAAGATCGC GCTCGAG      467

```

(2) INFORMATION FOR SEQ ID NO:1109:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 74 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1109:

```

GAATTGCGGA AACGGTCGTT CCACTCGCTC CAATGTGGCC CCCAGGCACC TACCTGATAG      60
CCATATGGGT CGAG                                     74

```

(2) INFORMATION FOR SEQ ID NO:1110:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 427 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1110:

```

GAATTCGGCC TTCATGGCCT AGGAATTTAG GAACCAAGAT ACTGGGGTGT TATTGTTTCT      60
AAGCTCTTTC AGTGAACAGA TCTAGGAAAT ACATGTGTGT CCTAATCCAT GAATACACAC      120
TAAATATAAA TTATTTCTGT ATCTATGTCA AGCTAAACCT AAGTTCACAT TGAGGTTTCT      180
GACTTTAATA CAGTCCCACA AGGTCGTTC TAGCTTTCCT TCCTTGATA CCTTTGACTT      240
TCCTCTCCAG CTGTGGGAAA CTTGGCTCTC TCCATCCACC ACCCTTCAC TATTTGTTTA      300
ACCCTTGAC ATATATAAG CAGCGTTGA ACTGTCAACC TGTGTCCAT GAGAACTTT      360
ACCCACTAGA GTACAGCGT TATGCAGTTC TTTTGTAGT TTTATAGAT TATAGCCAAA      420
ACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1111:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 372 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1111:

```

GGTGAACCCG AATCACCGAT GGATGTGGAT AATCTAAAA ATAGTTGTCA AGACTCAGAA      60
GCAGATGAGG AGACAAGTCC AGGTTTGTAT GAACAAGAAG ATGGTAGTTC CTCCAAACA      120
GCAATAAAC CTTCAAGTT CCAAGCAAGA GACGCTGACA TTGAATTAG GAAACGGTAC      180
TCTACTAAGG GCGGTGAAGT TAGATTACAT TTCCAATTG AAGGAGGAGA GAGTCACACT      240
GGAATGAATG ATTTAAATGC TAAACTACCT GGAAATATT CTAGCCTGAA TGTAGAATGC      300
AGAAATTCTA AGCAACATGG AAAAAAGGAT TCTAAATCA CAGATCATTT CATGAGACAG      360
CCCAAACTCG AG

```

(2) INFORMATION FOR SEQ ID NO:1112:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 108 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1112:

```

GAATTCTAGA CCTGCCTCGA GCTATACCTG TATCCAGTCT TGATGCACAC CAGGCTGGGC      60
ACTTTCAGAA AACTACCTCT AACCTCCAGG GTTCCCTCAT CACTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1113:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1113:

```

GAATTCGGCC TTCATGAAGA TTGAGAAGAA GGAGGAAAAA AAGCCTGAAG ACATTAAGAA    60
GGAAGAAAAA GACCAGGATG AGCTGAAACC CGGACCTACA AATCGGTCTA GAGTCACCAA    120
ATCAGGAAGC AGAGGAATGG AGCGGACGGT CGTGATGGAT AAATCGAAGG GAGAGCCCGT    180
CATTAGCGTG AAAACCACAA GCAGGTCCAA AGAGAGAAGC TCCAAGAGTC AGGATCGCAA    240
GTCAGAAAGC AAAGAAAAGA GAGACATCTT GTCGTTTGAT AAAATCAAAG AACAAAGGGA    300
GAGAGAGCGC CAGAGGCAGC GGAACGGGA GATCCGCGAA ACGGAGAGGC GGCGGGAGCG    360
CGAGCAGCGG GAGCGTCTCG AG                                         382

```

(2) INFORMATION FOR SEQ ID NO:1114:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1114:

```

GAATTAGCAA AGGAAATCTC AGATTGCATT TCAAAGATG GTTGCTAGCT GCTGCCGTTT    60
CCTTTGCTAT TTCTGTGCGA TTAGCCGGCA AAATCAGAAG GCCATGTTTG AGCATCTGAG    120
TTATCTTCTG GAGAATAGCA GTGTGGCCT AGCCTCCCCG TCGATGAGGG GATCCACCCC    180
GCTGGATGTG GCAGCTTCCT CTGTGATGGA CAACAATGAG TTAGCGCTGA GCTTAGAGGA    240
ACCAGACCTC GAG                                         253

```

(2) INFORMATION FOR SEQ ID NO:1115:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 76 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1115:

```

GAATTTTTTT TTTTTTTAAA GAAAGAAAAC TAGGGCGATG CAATGTCCAG ACAGAAGCCG    60
GGGGCCGGGG CTCGAG                                         76

```

(2) INFORMATION FOR SEQ ID NO:1116:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 70 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1116:

GAATTCGGCC TTCATGACGA CCGCGTCCAC CTCGCAGGTG CGCCAGAACT ACCACCAGGA 60
CACCTCGAG 70

(2) INFORMATION FOR SEQ ID NO:1117:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 526 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1117:

GAAAATGAAA AGTTCGTCTT TTGATGAAGA CAAAACCTTT GTAGCAGAAA CATTGGAAAT 60
GGGTGAGGTT GTTGAAAAGG ATACAACAGA ACTCATGGAA AACTTGAGG TAACCAAGCG 120
AGAGAAATTA GAGCTGTGAC AGAGACTGTC TGATCTTTCT GAACAATTGA AACAGAAACA 180
TGGTGAGATT AGTTTTCTAA ATGAAGAAGT TAAATCTTTA AAGCAAGAGA AAGAACAAGT 240
TTCATTGAGA TGTAGAGAGC TAGAAATCAT TATTAACCAC AACAGGGCAG AAAATGTACA 300
GTCATGTGAT ACTCAAGTAA GCTCTTTATT AGATGCAGTT GTGACTATGA CAAGCAGGGG 360
TGCTGAAGGA TCAGTTTCTA AAGTAAATAA AAGTTTGGT GAAGAATCAA AAATAATGGT 420
GGAAGATAAA GTTCTTTTG AAAATATGAC TGTGGAGAA GAAAGTAAGC AAGAACAGTT 480
GATTTGGAT CACTTACCAT CTGTAAACAA GGAATCTTCA CTCGAG 526

(2) INFORMATION FOR SEQ ID NO:1118:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 190 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1118:

CGATTGAATT CTAGACCTGC CTCGAGCCGA CCTACTCCAC AGCTGTCCTG ACTGTGTAAG 60
CGAGATGATG ATTAGTGATC AGACGAAAGG ATTCCTGTCA TTGGTAACCC TCTCAAAGTA 120
TTTGAAAAC AGTTCAATTT TCATCTATTT CAGAAGCAGC CCGTGGTGTC TATTGAGGCT 180
CACCTCGAG 190

(2) INFORMATION FOR SEQ ID NO:1119:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 331 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1119:

GAATTCGGCC TTCATGGCCT ACCATCCTGC ACTCAACCAA TCATCTGATG CTGACTCAGA 60
AGCTCTGTTT GGAGTACCTA ATGATAAGAA TTTACTGTGG GCTTATGCTG TTATCGGTAC 120

```

TTACATGTTT TTAGTTTCTG TCATTTTTTT TTGTCTGTTT TTAAAGAATA GCTCAAAGCA    180
AGAAAAAGCA AGAGCATCTG CTGAGACATT TCGAAGAGCA AAATATCACA ACGCCCTTCT    240
TTGTCTCCTT TTTCTGTTCT TCTTTTTTTA TGTTGGAGCT GAGGTAACAT ATGGCTCTTA    300
TGTTTTCTCA TTTGCAACCA CCCATCTCGA G                                331

```

(2) INFORMATION FOR SEQ ID NO:1120:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 352 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1120:

```

GAATTCGGCC TTCATGGCCT ACAGATTTCG ATCTTTACAA CCAGAAGCTC AGGGAGAAGT    60
TGAAGGAGGA GGAGAACACA GTGGGTATGT TCAGATTGCT TTTGGGTACC CTTGATCCAG    120
CCACATTGTC TACCCTAGAT GGGTGCTCAT GGTACTTCTT GGTGGCATT CAATAATAGG    180
TTGAGTTGTA TACCGTCTGT CTTTACACTA CATTATGAAA ATGAGATTAT TAAATAAGAA    240
TTTGATGTA GCTGATAAGC TAGTAGAATT GGCACATGAT CCCTTTTATA CCCAGCCCTC    300
CTGTCTGGTG TGCTTGAGGT AATAATAACC CCTTTTATAC CCAAACCTCG AG          352

```

(2) INFORMATION FOR SEQ ID NO:1121:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 484 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1121:

```

GAATTCGGCC TTCATGGCCT ACCAATCTCT TTTACTGAGC ACAATGTGGG TAAACTGCT    60
CTCTATAGTA GCAGAATTTT GTTTTCCCCC TTTCTAGTT ACTGATGAAG AGACAGCTTC    120
AGATGCTCTG GAGAGAAACT CTCTATCCTC TCAAGACCCA CAGCAGCCCA CCAGTACTGT    180
CTCAGTAACG GAAGATTCTA GTACATCGGA GATTGACAAG GAAGAGAAA AACAACCAC    240
TCAAGATCCT GACTTGACCA CCGAAGCAAA TCCTCAGTAT TTAGGACTGG CAAGAAGAA    300
AAGTGGCATC CTGCTGCTCA CGCTGGTGTC CTTCTCATT TTCATACTCT TCATCATAGT    360
CCAGCTCTTC ATCATGAAGC TGAGGAAAGC ACATGTGATA TGAAGAGAG AAAACGAAGT    420
TTCAGAACAC AACTAGAAA GTTACAGATC AAGGTCAAAT AATGAAGAAA CATCATCGCT    480
CGAG                                484

```

(2) INFORMATION FOR SEQ ID NO:1122:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1122:

```

GAATTCGGCC TTCATGGCCT ACTTATGTTT TTCTCATTTG TTGACCTAAA TGATCTTTAT    60

```

CCAAACTATT CCAAATCTG AATTTCTGGG TCCTTCTTTC TTAAATAT TCTGTTCAAT	120
ATTAACAAA CAAACGTTTG AGAACATGAG TAACCTTTTG ACTTTATCCC GTATCTGTTT	180
GCTAATGTTT TGTTCATGT CTTTCTTGC AGAACACACT GTTGACAGCAG CTAGGAGTGC	240
ACTCGAG	247

(2) INFORMATION FOR SEQ ID NO:1123:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 276 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1123:

GAATTCGGCC TTCATGGCCT AGGAGGAAGC TAATAAGAGA CTGTCAAGAT TGTATACCTT	60
CTTGGTTTCT TTAAAGAATT TGTTCCTTT CTAATTATAC AGCAAAGCAG CATTGTGTTA	120
CTGACTGCCT AAAATCACTT AATCTCAGGT GAACGCATCA CTGCCAAAC TGTGGAATG	180
CTATTTGTGT TTGTTGCAC TGTTTTTTC GTTGTGTTGT TTGTTTATTT GGTGGCTTT	240
TTGGAGAGGG AAATTTGGAA ACGGACACA CTCGAG	276

(2) INFORMATION FOR SEQ ID NO:1124:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 252 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1124:

GAATTACTAG CAGAGATCAG TGCTATAAGG GAAAAGGAGA TTGATTGAA AGAACTGGA	60
AAAAGAGACA TTCCATGAT GGAGAAAGTA TCAGGAAAGA TGGCTGTTGT TGAAGAAATG	120
GAGGCAGATT TGAAAGAAAC TGGAAAGAA AATTTTAGAG AGAGAGGATC TGAAGAGATC	180
TGTGTTACTG AGGAAAAGGT GGCAGAAATG AAACAACTG GAAAACAGA CATTCTCCA	240
AGGGCCCTCG AG	252

(2) INFORMATION FOR SEQ ID NO:1125:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1125:

GAATTCGGCC TTCATGGCCT AAACAGAATA TTCTGAGGCT AAAAGAAAAT ACACCCCGC	60
AAAAATCAAT ATAACTATGA TTAAGTACAC AAAACATGCA GCCCATAAAA CATATTTTAC	120
CTATGAAACT GAGACTGAGG AATTAAACAG TAAACAGTCA TTGTTAAAG AAATATTTT	180
ACAATTTATT GCCTATGTAT AAGGCAGCAG GCCTGTACTC TCTGTATTT TCAATCTCTT	240
CCCCTACTCT GGCTCTTCT CAGCATATAA ATATGTTTCT ATCCCTACCT TATGGAAC	300
ATTCCCCATC CCTCGAG	317

(2) INFORMATION FOR SEQ ID NO:1126:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 382 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1126:

```

GAATTCGGCC TTCATGGCCT ACTTTGTAAC TGTGAAATAC TCTCCAGGAT TTAAGAGGCT      60
GTGGAGCTCC AGATAAGAA TCGTTTATCT TTCTTCTGAA GAAATTCCTT TGGTTACAAG      120
TTTACCCCAT AAACGGCAAC ACACTCACCT CCATCCAAGA CAGACTCAAG GTGGAGGAAG      180
CGTGGAATG TGCTTCCGGA CAAAGCTCTC AGTATCCTGG GTGCCATTGT TTCTTCTACT      240
CAGCCGTGTT TTTTCTACTG AGACAGACAA ACCCTCAGCC CAGGACAGCA GAAGCCGTGG      300
GAGTTCAGGC CAACCGGCAG ACCTGCTACA GGTCTCTCT GCTGGTGACC ACCCACCCCA      360
CAACCACTCA AGAAGCCACT CG                                     382

```

(2) INFORMATION FOR SEQ ID NO:1127:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 334 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1127:

```

GAATTCGGCC TTCATGGCCT ACAGACTTCT GTGTGTGGGA CTGAAGCACC TGTGTGCA      60
TCTGAAGAAG CTCTGGTTGG TCAGCTGCTG CCTCACATCA GCATGTTGTC AGGATCTTGC      120
ATCAGTATTG AGCACCAGCC ATTCCCTGAC CAGACTCTAT GTGGGGGAGA ATGCCTTGGG      180
AGACTCAGGA GTCGCAATTT TATGTGAAAA AGCCAAGAAT CCACAGTGTA ACCTGCAGAA      240
ACTGGGGTTG GTGAATTCTG GCCTTACGTC AGTCTGTTGT TCAGCTTTGT CCTCGGTACT      300
CAGCACTAAT CAGAATCTCA CGCACCATCT CGAG                                     334

```

(2) INFORMATION FOR SEQ ID NO:1128:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 251 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1128:

```

GAATTCGGCC TTCATGGCCT AGTCTGTCCA TCTGCTTTCT CTGGACCTCC TTCTCATACT      60
TTGAATTTTT TAAGTAGTTT GTCCCTCATA TGATTTTTTT TCTATTCTTT TTCCCTTCC      120
TGTCTTCTCT TCACTCCTTT CCCTCCACCC TCCCTCCCTC CCTTCCTCTC TCCCTTCTCT      180
CCTTCCTTCC ATCCAACCAT CCATCCATCC ATCCATCCAT CCATCCATCC ATCCATCTAT      240
CCACTCTCGA G                                     251

```

(2) INFORMATION FOR SEQ ID NO:1129:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 372 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1129:

```
GAATTCGGCC TTCATGGCCT AATTTCATGT NCCTTTGAGC TATCTTTCCA TTTGTAGGA      60
ACACCGTCAC AGGAGACAAT TTCATGGACC TTTGAGCTGT CTTCCATTT TGTGGGAACG      120
CCGTCACAGG AGACAATTC ATGTGCCTTT GAGCTGTCTT TCTATTTGT AGGAACGCTC      180
TCAGAGGGGA CAATTCATG TGCCTTTGAG CTGTCTTCC ATTTGTAGG AACACTCACA      240
GCAGTGCTTG GGGTTCACG TTACCTAAAT CCCATGATGG GTGAGAAGAC TGAATGGGAC      300
GTTTATTTT TGTGTTAAAA AGCCCACGCA AATAGAGTTT AAAATAGTCT CAGTGAGCTG      360
GGCATTCTCG AG                                     372
```

(2) INFORMATION FOR SEQ ID NO:1130:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1130:

```
GAATTCGGCC TTCATGGCCT AGTGCCTAGT TACAAGGTTT TATTACAGCA GTATTTCTAA      60
ACATTGGTT AGTCTGTCTC TGCTTTCCC ACCATAATTT TCTAGCACTT GTAGCTCACC      120
TTATCTCCA CTTCCTTTT TAAATAGAAA ACAGGCTTGT TCTGTTTGA CCAGGTATAA      180
CTCTTGCTC AGACTGTCTC TAAAGCCCAG AAAACTATTC CTCTAGTGGT CCAATGAAGT      240
GTTCCCCATT GAAAGTTTGC CTCATGTCAC TCGAG                                     275
```

(2) INFORMATION FOR SEQ ID NO:1131:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 388 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1131:

```
GAAAATTGAG CCTATGTTGG AGACACTGGA GAATCTTCC TCTCGCCTGC GTATGCCACC      60
ACTGATCCCT GCTGAAGTAG ACAAGATCAG AGAGTGCATC AGTGACAATA AGAGTGCCAC      120
CGTGAGGCTA GAAAACTGC AGCCATCCTT TGAGCCCTTG AAGCGCGTG GAGAGGAGCT      180
TATTGGACGA TCTCAGGGAG CAGACAAGGA TCTGGCTGCA AAAGAAATCC AGGATAAATT      240
GGATCAAATG GTATTCTTCT GGGAGGACAT CAAAGCTCGG GCTGAAGAAC GAGAAATCAA      300
ATTTCTTGAT GTCCTTGAAT TAGCAGAGAA GTTCTGGTAT GACATGGCAG CTCCTCTGAC      360
CACCATCAA GACACCCAG GACTCGAG                                     388
```

(2) INFORMATION FOR SEQ ID NO:1132:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1132:

```
GAATTCGGCC TTCATGGCCT AAAGTTATAC CAGCTAAAGT GCAGTAGTGT CACTTTTTTC      60
CTGTCAATAT ATAGAGACTT CTAATCATA ATCATCCTTT TTTAAAAAA AGAATTTTAA      120
AAAAGATGGA TTGACACAC TCACCATTTA ATCATTCCA GCAAAATATA TGTTGGCTG      180
AAATTATGTC AAATGGATGT AATATAGGTT TGTTTGCTG CTTTGATGG CTACGTTTG      240
GAGAGAGCAA TCTTGCTGTG AAACAGTGTG GACTCGAG                                278
```

(2) INFORMATION FOR SEQ ID NO:1133:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 368 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1133:

```
GAATTCGGCC TTCATGGCCT AATCATTATA ATTTAGTTTG AATTCTTAAA ACCCCGTTAC      60
TAGAACTTAT GTTTAAATTT ATAAATTATA AATAGTTATA AATTATAAAT AAATTGAGAC      120
TGAGGCAGGA AAATCACTTG AACCCAGGAG GCAGAGGTTG CACTGAGCCA AGATCACGCC      180
ACTGCACTCC AGCCTGGGTG ACAGTGAGAC TCCATCTCAA AAAAAAAAAA AAATTATATA      240
TAAATTCTGG TAAGTAAGTT TGAAGAAAAA CCGATTCAA TAGTATATAT TCAGCTTTAT      300
AAATTCTGTT AAGCATATTT GAATGAGAAT TTATTAATAA GGTTTATATT AAGTCTACGG      360
TTCTCGAG                                368
```

(2) INFORMATION FOR SEQ ID NO:1134:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 441 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1134:

```
GAATTCGGCC TTCATGGCCT ACGTCTGATT CTCTAAGTTC ATTTCTTGGT GGTGGAGGCT      60
CATTCTTCTT GGAGTCACTG AAATTTTGG GATATCTTTC GAAGCTTGA TCTTCCCTTC      120
GTGCAGTAGG TCGTGCTTTT TTCCCTCAC TTGACCAAC AAAGCGATCC CGCCTTTCAA      180
AAGATGAAGA CTGTACTGCT GAACTCTCAG GAAACCTGCC CCTCTCTCGG TGATCAAAGT      240
CATTAAATCT GTTCTGTTGG CGAGAGTAGT CGGATCCATG GCCAAATCGT GCATCTGTAT      300
CTAGAGACAA CTTTTTATTC TCGCTCCAGT AAGGATCATC TCGCCTATGA TCTACATCAC      360
GTGGGCGTTT CAAGGAATTC CTTTTTCTT GTTCATAACG AAGCTGCTGT TGTTCCTTC      420
TGAGTTCCTC TCTTCTCGA G                                441
```

(2) INFORMATION FOR SEQ ID NO:1135:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 115 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1135:

```
GCGATTGAAT TCTAGACCTG CCTCGAGCAA GAAACGTTT CTAAGTCAA GGAATAAATC    60
CAAAGCCTCT AAGACTGGT GAGAGAGAGG AAAAGAAATG ACGGAAGCAC TCGAG    115
```

(2) INFORMATION FOR SEQ ID NO:1136:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1136:

```
GAATTCGGT TTTACTGAAG CTATGTTAGA AACGTCATGT AGAAACTCTT TAGATACTGA    60
GCTTCAGTTT GCTGAAAATA AGCCAGGCAT GTCTTTGTTG CAGGAAAACG TAAGCACAAA    120
GGGTGACGAT ACAGATGTCA TGCTCACAGG TGACACTTTG AGCACCTCAT TGCAGTCTTC    180
CCCAGAAGTG CAGGTACCTC CTACCTCCTT CGAAACAGAA GAAACGCCCC GTCGGGTACC    240
CCCAGATCTC GAG    253
```

(2) INFORMATION FOR SEQ ID NO:1137:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1137:

```
GAATTCGGCT TCATGGACGA GGAGATCGTG TCCGAGAAGC AAGCCGAGGA GAGCCACCGG    60
CAGGACAGCG CCAACCTGCT CATCTTCATC CTGCTGCTCA CCCTCACCAT TCTCACAATC    120
TGGCTCTTCA AGCACC GCCG GGGCCGCTTC CTGCACGAAA CCGGCCTGGC TATGATTTAT    180
GGTCTTTTGG TGGGCCTTGT GCTTCGGTAT GGCATTCA TG TCCGAGTGA TGTAAATAAT    240
GTGACCCCTGA GCTGTGAAGT GCAGTCAAGT CCAACTACCT TACTGGTAAA TGTTAGTGGA    300
AAATTTTATG AGTATATGCT GAAAGGAGAG ATACTCGAG    339
```

(2) INFORMATION FOR SEQ ID NO:1138:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 363 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1138:

```

GAATTCGGCC TTCATGGCCT AATTCAGAGG TGGTGGGACC TTGGCTATGA TTCTGTTCAA    60
GCCCCCTAAT TTTACAGATT TTATGGAATT GAGCAACAGA CAAGATGATT TTGCCTAGGT    120
TCATAAACAG GAAAAAAGGA GAGCCAGGAA AGAACTCAAT TGTGTAAAC TGCTGTCTTG    180
TCTTGATGTT CTGTCTTCAT TCATCATCCA GCCTTTCCTA GGAGTGTGAG AGATAGACCC    240
AGGTAGAAGT GGGCTGCCCA TGGGGGGCTT AGCACAACAG AAATTTATTC TTTTACTGTT    300
CTGGAGGCCA GACATCTAAA ATAAAGGTGT TGATGGGGTC ATTCTTCCTC TTGAGGGCTC    360
GAG                                                                    363

```

(2) INFORMATION FOR SEQ ID NO:1139:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 367 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1139:

```

GAATTCGGCC TTCATGGCCT ACTGTAGAA TATTGAGCAA TTTGTGTGAA GTGGGGAAGA    60
TGAAGAAGT CAGAAATTGA AACGGAAGAA TGAAGAAAAG AAATAAAAT GAAGTTAAGA    120
TAAGAAGTAA TCTGGAATCA GAAAGCACTA CGCTAAGAAT CCCGTTCTGC TTCCAGAAGT    180
GGAAGTGTCT ACGGATCGGG GAAATCTGCA AGGCATACCC CTGCAAGGTC TCGCTCCAAG    240
GAAGATTCCA GGCCTTCCAG ATCAAAGTCC AGGTCCCGAT CTGAATCTAG GTCTAGATCC    300
AGAAGAAGCT CCCGAAGGCA TTATACCCGG TCACGGTCTC GTCCTCCGCTC CCAAGGACGA    360
TCTCGAG                                                                    367

```

(2) INFORMATION FOR SEQ ID NO:1140:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 389 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1140:

```

GAATTCGGCC TTCATGGCCT ACACCCTCAC CACCCAAGGG GTCATCATCT CTGGCCACCA    60
CTCCACCAGA TGGGCAGAGC AGCTATGACC GCCACCCAGC CCTCCCGCTC AGGCCACAGC    120
CGGAGCCTCC GCATTGCCCC CACCCCATT TTCCAGGGGG GTTGTAATTT ATAAGCTGAC    180
GAAGGTAGCC AGACTTCCGG AGGACTGACC ATCTCTCACT GTCCTCCCCA CCTTCTTCCT    240
CACTCACACA TTTTGTGTAC ATCTGGGCCC TTAGTTTTTA TTCTGTTTAT TATATGTCTC    300
TGTCTCTCTC TATTGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGG    360
TGCAGGAGTG CCACCCCCAG GGCCTCGAG                                                                    389

```

(2) INFORMATION FOR SEQ ID NO:1141:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1141:

GAATTCGGCC TTCATGGCCT AGCAGCACTA ATCTTGATGG GACAGAAAAT TTCAAATGAA	60
GAGCTTTCCC TCTTTTTTTC TTCCTTGGGG GCATGCCAGC TTGTGCTTCT ATGTCAGTAG	120
CCTTGAGTGT GCCATTCCTG GCCCAGACAC TTGCATGCAG TTGGTTTGT CCTCCACCAC	180
TTTGATCATG TTGCCCATGG TCTAGACACC TCCGTGTCCT TGTTATCATG GCATATAGTC	240
TGTATGCCTC TGCTGGATT ATAAGCGGCC CCATAATAGC CTCCTTTCT GGTACCCCC	300
TTGATCTCGA G	311

(2) INFORMATION FOR SEQ ID NO:1142:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 530 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1142:

GAATTCGGCC TTCATGGCCT AAAAGATCAG ATTTTGTCAT TTAAGACACA TATTTTACAT	60
TCAAAAATGT AAAGTCAGGG TGTGCTTAA AATCCATTGG TGTTTAATC ATGCTTAAAC	120
ATGTGACTGC TGTGGCCAG GATACAGTTG TGGTGGTGC GTCAGTATCT GAGCACATGT	180
GAACCTNGCC ATGACTATTC ATATTGTCTT CTCTTAACT GAATTATGTC CATGGTTGCC	240
AACATGTACT GTCCATAGTT GCCACCATGT ATTTAGGTTG TCATTAAAA TGCTCTCAA	300
AAGATTTTAC CATGATTCTC CATCAAAATA GAAAGCTATT TTGTATGAAG AAGAATCTAG	360
ACCAGAAAAG TCTGATAAAA ATAATCTCTT AAATAAGTCT ACATTAGGTC TTTCAATTTG	420
TATAAAATGT AAATTTTGAA TTATAAGAAA ACAATTGTT ATACTGTAAT TGGTAGCATT	480
TTTTCTTAGT AGGTACAAA ATAATGTGTA CCTTACATTC AAATCTCGAG	530

(2) INFORMATION FOR SEQ ID NO:1143:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 615 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1143:

GAATTCGGCC MNCATGGCCN ACCTATGTNA NGNATTCNN CTCCATTNC CCNAGGGTTC	60
TTTCCTGTTT TTAGAAATGT TTTGTGATTT TGCTTCAGAC ACAGTTTGT TACTTCTNGT	120
AAGCATTGTT CTTAGATNGC TGGCTTTATA TCTATCACTC CCTTGCTCAT CTGCCCATCC	180
ATCTATCCAT CCATCCATCC ATCCATCCAT CATCCCTCCA TCCACTTGCT CATCTGCCCA	240
TCCATCCATC CATCTATCCA TTCCATCCAGT CCATTCACCA CCCACCATCT ATTATCCATC	300
CATCCATCCA TCCATCCATC CATTATCCA CTCACCCATT CATCCATCAT CCATCCATCC	360
ANCCATCCAT TCATTAGTTC ACCCTTCATC CATTCACTCA CCCATCCTTC CATCCACTCA	420
TCCAATCACC CATCCATCCA TACATCCACT CATCCATTCA CCATCCATCA ATCCACTCAT	480
CCATTATCC ATCCATCCAC CCACCCAGAC GTCCGTCCAT CNATCCATCC ATCCATNCAT	540
CCTTCTATNN NNTCTGCCAA CAATCCANAC ACNTGTCCNT CNATCCCTTC CAACCACTCA	600
CCCAGCACAC TCGAG	615

(2) INFORMATION FOR SEQ ID NO:1144:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 57 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1144:

GAATTCGGCC AAAGAGGCCT AACCGCGGCC GCTACTTCGG CCTCTTTGGC CCTCGAG 57

(2) INFORMATION FOR SEQ ID NO:1145:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 227 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1145:

GAATTCGGCC TTCATGGCCT AGGTTTCTT TTATTTAAAA GATCATTAC AAAATACCAT 60
ATCCATAGAT TTACTTCTG TCATATAGCT GAATGTGTTA AGTGTTTGGA ATTCCATTCT 120
TACATTTAAA GGTCAACTGG ATTGCCAGC AGTTTAGATG CATGTGTTTT GTTCTTTATC 180
TTATCCACAT TGAAGATGTA AGTATTGAAT TCTAGACCTG CCTCGAG 227

(2) INFORMATION FOR SEQ ID NO:1146:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 447 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1146:

CTCGAGTATC TCCTCCTTC TGATATCCAG TTTAGGTGGT CCAATTTTC CATCTCGGCA 60
TACAGCAAAT TCTTCTGACT TTGCATAGGC AGATTCTTTT TGTCCAACCC TGGCTTTAAC 120
TCTGACCCAA AGAGAATTTG ATGGATCACC AACATGATCA GAAATATTAC AATAATGATG 180
AGAAATATTG ATGCAGGCAT CAATCCATTC TGAATCTTA ACACCATAGT TCTTTACCTC 240
TACGGTAAAA ACAGGGACCT GTGGCATGAT CTGGTACTCC CAATATACGA TAGGGTTTAT 300
GTTATAGGAT TCAATTGTAA CATTAGTTGG TGTAGGCACT GAGGACGGCC CCAGATCCGC 360
GGTGCCCATC TCAGCCCTGC TCACACCCTG CATGACAAGG GGTAGGAGAA AGAGGAGAGC 420
CATGCTGCTA CCGACGGTCG CTGGCTC 447

(2) INFORMATION FOR SEQ ID NO:1147:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 271 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1147:

GGGCGCCATG TTTGCCATCT CAGGTCCAGG TTTCTCCCGG ACTTCGAAGA GCTCATTATC	60
GGGTCTGATT TTCAGTCTCT TCTGCAGAGT CTTCGGGAGC TCCAGCATCC GCTGCTGCAT	120
CTGCTTTATG GTCTTATTTT TCTCCAGAAG TTGCTGCTCC AAGTCCTGTT TCTCCTTCTG	180
TAGCTGTGTG AGATCCATGG CCCCACCTC ACCATTGGT GTTCTTCCTG CAGTTGGAAG	240
CTGGAACACA GGGTCTCGCA TGGCCCTCGA G	271

(2) INFORMATION FOR SEQ ID NO:1148:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 298 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1148:

GGATTGGGGA GGGAGTGTGC GAATAGGTGT GGGTGACAGA CATCAAGTAC TTAACAGGGT	60
AATAGAATAT CACAAGGCAA GTGGAGGCAG GGCGAGATCA CAGGACCACA GGACCAAGGC	120
AAAATTAAAA TTGCTAATGA AGTTTGGGC ACCATTGTCA TTGATAACAT CTTATCAGGA	180
GACAGGGTTT GAGAGCAACC GGTCTGACCA AAATTTATTA GGCGGGAATT TCCTCCTCCT	240
AATAAGCCTG GGAGCGCTAT GGGAGACTGG AGTTTATTC ATCTCTGCCT GCCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1149:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 332 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1149:

GAATTCGGCC TTCATGGCCT ACGGCATTTT AGCGTCAAGT GCACTTAGCG GGGTACCCGG	60
CTCCCCCAGC CCCCACACCC GTCCTGGGTC TCAGGGTGGT TCCAGCTTCT CCTTGGGCAG	120
CCAGAAGTTG GAGTCCCATC CCCCANNNGA NATTTTTTTT TTTTTTTTTT TGTGATCAGG	180
GAGTGTGTCC AACGTAGCCC CCTGGCCTGT GCAAGCCCTG ACTCCCTCAT GGTGCCTCGG	240
AGAGTGGGGA GCATATTGGG CTGGGTAAG CACTAGACCC AAGTAGACTG GACACAAAGG	300
GCTCGCCCAG GGCCTGGCG CCACCCTCG AG	332

(2) INFORMATION FOR SEQ ID NO:1150:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 400 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1150:

GCGAGGCAGG GAACTCACT TCACGTCTCT TTCCTTGTAG AGCATCATGC TTATTTCTGG	60
CTCACTCACA TCCTTGTCTC GGGAGTTCTC TGCCGAGCCA TTGCCCCCTA CAGCAGAGAG	120
CACAGCTGGC TGCACTAGTG CTGAAGGAGC CAGCCCCAGA GCAGGGCATT TCCAGGGGCT	180

CTTGTCACAG AGCGGCAGGC GTTGTGTGCA GAGAACGCCC CTCCCACGCA GCACAGAGAA	240
CGCGGGGTGG GTGTGTGGCT CCGGGCCTGT GGGGCTTAGG CTGCCTGAAC CACCGCCGAC	300
TGGCACCATG ACTCGGCATT CCTGGAAGTG CCTTACCAAG TTGTTGTTGT TGTTTGTGTTG	360
TTTTTTAAGA GACGGGCTTG CTCTATCATC CAGGCTCGAG	400

(2) INFORMATION FOR SEQ ID NO:1151:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 329 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1151:

GAATTCGGCC TTCATGGCCT ACCCAGACAA ATACCAAGTT TATTTACAA AACTAGGAA	60
GATGGGTGA GGTGGAGGT GGGGACACA GGTGCGCAGC TGCACAGAGT CAGCAGCAGC	120
AGCCTGCTCC CGCACTGAG GACTCGGCCT GGANTGCAGT GCCTCCAAT CAACACGCAG	180
CAAGAGGGGA GTGCAGGGAG GGCCCTGAAC ACCAAGCCTC TGAAGGGCTA AGGGACACAG	240
CTCCAGCTGT CCCAGGAAAA CCAGCAATAA ATAAAAGTGA GGCACGGCCC CACCCACACA	300
TATCATCTAG TCACCCATCT TCACTCTGG	329

(2) INFORMATION FOR SEQ ID NO:1152:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 313 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1152:

GAATTCGGCC TTCATGGCCT ACCCATAGCC ATGAGCATGA CTGGCTGCCA GCTCTAGTC	60
ACCAAATGCC ATTCTCCGCT GAAAGAAGCA AGGGCTTTTC AGAGAATAGA CTGAGCACAA	120
AAATGACAAAT GGTAATGGAG TAGAACACCT TGACTTTTAA AAGTCCACGA GTCCACAGTG	180
ATGCCTAAGG GAAGTAGGGA GGAAAGCTCT TCTTTACAAC ATCTTCCAGC TAACAGATGG	240
AAAAGGAATG ACAAATGAA AAATCACCAT ATTGCAACTC TCAATAAAGT AACTGATTCA	300
GGCATATCTC GAG	313

(2) INFORMATION FOR SEQ ID NO:1153:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 324 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1153:

GGGCTCCTCG CCAAGGAACT CGTGGCAGAA GAGGGCAGCA GTTGGCAGTA GCTGCCGATG	60
TCTGTCCCA GCTCCACCAT TCCTCCCTGT GGCTGTGCCG TGCTCGTGGT TTCAGTGTCC	120
GTGTGTCCAT GTGTCTGCCC TTCAGGAGCT CGCAGCTGGT GTGCTTGGCG GTCCACGGCC	180
TGTGTAGTGT CTCTCCCTGT CTGCGGGCGC CCCCACCCCG ATTCCTCTCC CCAGAAGCGG	240

TGGGATGGGC CCCCATGAAC TGCAGCAGCA TGCTGAGGTG TCCATGTTGT CTGCCTTTGT 300
ATAAAGAAAC AGCCTCTACT CGAG 324

(2) INFORMATION FOR SEQ ID NO:1154:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1154:

CGGAGTTTCAG CGGAGAAAAG AAAAAGCAAC GTTTAATTCT AGAAGGCCTC CTGTCCCTGC 60
CTGCTCTGGG TGCTCATGGA ATCAGCTGCT GCCCTGCACT TCTCCGGGCC AGCCTCCCTC 120
CTCCTCTCTC TCCTCAGCCT GTGTGCACTG GTCTCAGCCC AGTTTATTGT CGTGGGGCCC 180
ACTGATCCCA TCTTGGCCAC GGTGGAGAA AACACTACGT TACGCTGCCA TCTGTCACTT 240
GAGAAAAATG CTGAGGACAT GGAGGTGCGG TGGTCCGGT CTCAGTTCTC CCCCAGTGTG 300
TTTGTGTATA AAGGTGGCGC ACTCGAG 327

(2) INFORMATION FOR SEQ ID NO:1155:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 504 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1155:

GAATTCGGCC TTCATGGCCT ACGAGCCCTT TGCCTCCAGT AGTCCACCTT TTCTGGACTG 60
AACTGATATT CACCTTACAC AAATGGATTG ATGTCTCATG TCTCCCTAAA ATGTACAAAA 120
CCAAGCTGTG CCCCAACCACC TTGGGCACAT GTCATCAGAC CTTCTGAGGC TGTGTACGG 180
GTGCACGTC TCAACCTTGG CAAAATAAAC TTTCTAAGTT ATCTGAGACC TGTCTCAGAT 240
TTTTGGGGTT CACACACCAT ATGTCTGAAT ACTGTCTTTT CCTATCTCTG GCTCCATCCC 300
ACATTGTAAG GGGCCTTGCA CACACAAATG TGGACATTCC AGCCTGCACA CCTAAGCATC 360
GCCTCCACTC CCACCTTCC AGCGGATGGG TGTGAAACT GGCAGTGTG TTTCATCTCA 420
AGATGATGTA TACAGGAAAG TGGTCCAGGC AGATCCTGTG AGCAGGCTTG GGCCCACTTG 480
GGAAGAGTAA CCCAGGATCT CGAG 504

(2) INFORMATION FOR SEQ ID NO:1156:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 686 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1156:

GNNNNNNNNN NNNNNNNNNN TTCCCCTTN TNNCATGTTT TGTTCTTTN TCCTTGTTN 60
TTTTTTCGGC AAAATATTTC AAGNTATACC CAGGCAACAT NAANTCCAGT TCGGATTTTA 120
ATTAGTCGAG TATGCAGCGT CTTTTCATTT TTATTACTCA AAAAAGTTTC ATTTTITAT 180

```

TTAGCTTTCT GACTCTGTGC TTGTGCCTTC AACACTTTCA CAACGATTTT CTGCTCCTCG      240
ATAAGGAAAG CACGCTTGAT CCTGTCACGA ACACATTTAG CACACATGGA ACCACCATAG      300
GCCCTGCTGA CATGTTTCTT TGTTTGGAC AATCTCATAA GAACTTTAGG TCTTACAGCA      360
CGAACCCCTC GAAGTCTGCC TGGGCACACA CCACATGCAG ATTTTGGTGC TTCCCAACC      420
TTCTTGGTAT AAAGGTAAC AATTCTATTA CCAGGGGTTT GGGACACCCT AGTTTGTGTA      480
GAGGCTGTAT TGTAGGAAAG CCTACGTCGG TATGTCAAAC GCTGGACCAT TCTGAGTGCC      540
TGCAGACAAC CAAGGGTGAC TATAATGACA GCGTGCAAGT TGTGGACTGT GGACTAAGTC      600
TGAATGATAC TGCTTTTGAG AAAATGATCA TTTCAGAAAT AGTGACAAAC AACTTACGGG      660
GCAGCAGCAA GACTCACAAC CTCGAG                                           686

```

(2) INFORMATION FOR SEQ ID NO:1157:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 274 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1157:

```

GCAATTGCT TTTTAAAAA TACATTTCA TACACTAAGT TTCTGTTAG CCTAAGTAAT      60
TATATTTCTA ATTAAGTTCA AAGTAATTGA TAGGTGGCAA AGGATATCAA TCAAAACCAG      120
TCCAAGTAAA AAATGTACAC TAATTTAATA ACAATATTAT TCTATATTAC TTTTTTTTTT      180
TTTTTTTGAC ACAGGAGTTT CACTCTTCTT GCCCAGGCTG GAGTGCAGTG GCACGTCTCG      240
GCTCACTGCA ACCTCCACGC CCCCAGACT CGAG                                           274

```

(2) INFORMATION FOR SEQ ID NO:1158:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 196 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1158:

```

GAAGATGGAC AACCGGGATG TTGCAGGAAA GGCTAACCGG TGTTTGGGG TTGCTCCCCC      60
TAAATCTGGA AAAATGAACA TGAACATCCT TCACCAGGAA GAGCTCATCG CTCAGAAGAA      120
ACGGGAAATT GAAGCCAAAA TGGAACAGAA AGCCAAGCAG AATCAGGTGG CCAGCCCTCA      180
GTCCCCACAT CTCGAG                                           196

```

(2) INFORMATION FOR SEQ ID NO:1159:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 141 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1159:

```

GAATTCGGCC TTCATGGCCT AGAGGTGAAA TACAGAAAGC CTTTTTCTT TGATCTTTTC      60
CCGAGATTCA AATCTCCAAT TCCCATTTGG GGGCAAGTTT TTTCTTTCAC CTTCATATG      120

```

AGAATTCAGC GAACCCTCGA G

141

(2) INFORMATION FOR SEQ ID NO:1160:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1160:

```

GAATTCGGCC TTCATGGCCT AGTAATATAT ATAATTTATA AGTAAATATA AATTAGGGAG      60
GTGTAACCAA CATTTTCATA GAATACATAG TCAAAAATGG TTTGCAACCT CTGCCTAACA      120
AAAATAAAAC ACCCTACATC TTTGGTTCAA GATTGTCACC CCCAACAGTT GTGTGAAATG      180
TGGGGCAGGA ATTATCACTA TTTTCCTTTG GAAATTAAGG TTCCAAGAT AATGAGACCA      240
GAGCCAAAGG TCAGAGTCCA CTGTCTTCTC TCTGAGGCCT CAATGTGAAG ACCTGAAGTG      300
TGGCAGCAGA TAATCTGGA GACCTGTAA TCAGCTGTAT GCACCACAAC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:1161:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1161:

```

GTATTCATC ATATAATTTT CTTCGAATTG GGAATTTAGG CAGTATGTTA TGGGATTTT      60
TTTTTAATTT ATTTTTTTTT TTTTAGGAA GCTTGTTTCT CTTTTCATT TATAGAGAGC      120
ATGTTTATAT TAAAGAGTAC CTTCATACT ATAGAACACA TTTGTGGGTG GATTCGGTCC      180
TTTTCTTTCT ACCCTCCCTG ATTGCTGCTA ACAATCCAGA AAGACAGAAA TTTGTTTTTC      240
ATTCAGGCAC ACTCGAG          257

```

(2) INFORMATION FOR SEQ ID NO:1162:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 220 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1162:

```

GAATTCGGCC TTCATGGCCT ACTGTTTCCT TGCCCTTTTC ACCGTCTGGT GGTTCCTGTC      60
AGCCCTTGGC TTGTGGCCCT CTCATCCATC TTCCGAGCCT AGCACTCCAG TCTCTGCTTC      120
TGTCATCACA TCGCCTTCTC TTGAGAAAGA TCCCAGGCTG GTATTAAAT TGCTGTGGT      180
CAGGAACCTT GCCTGTCTTC CCCTACCCCC ACAGCTCGAG          220

```

(2) INFORMATION FOR SEQ ID NO:1163:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 405 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1163:

```
GAATTCGGCC TTCATGGCCT AATCACTTGA GGTCAGGAGT TCATGACCAG CCTGGCCAAC      60
ATGTTGAAAC CCCATCTCTA CTAAAAATAC AAAAATTAGC TGGGCATGGT GGGGGGCACC      120
TGTAATCCCA GCTGCTAGG AGGCTGAGAC AGGAGAATCA CTGAACCTG AAAGGTGGAG      180
GTTGCAGTGA GCGGAGATCG TGCCACTGCA GTCCAGCCTG GGTGACAGGG CAAGACTCCG      240
TCTCCAAAAA AAAATTAAAA ATAGAAATAC ATTTTAAAC CCAGATACTT GTAGCATATA      300
TAAGGGACAA TTGCAGTTTG GAAGGTACTT CCACATGTAT TATATAATT TATTTTAA      360
AATGAATCTC ATTTGGTGT CATGAAATTT GGCAAGCTTC TCGAG                        405
```

(2) INFORMATION FOR SEQ ID NO:1164:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1164:

```
GAATTCGGCC TTCATGGCCT AGCAGAAGCG AGAGGAGGAG GAGAAGAAAG CGGAGTTCGA      60
GCGGCAGCGA AAAATTCGAC AGCAAGAAAT AGAAGAAAAA CTCATCGAGG AAGAAACAGC      120
ACGAAGAGTA GAAGAATTGG TAGCAAAAAG GGTGGAGGAA GAACTGGAGA AAAGGAAGGA      180
TGAAATTGAA CGAGAAGTTC TCCGAAGGGT GGAGGAAGCC AAACGCATCA TGGAAAAGCA      240
GTTGCTCGAA GAACTCGAG                        259
```

(2) INFORMATION FOR SEQ ID NO:1165:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 114 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1165:

```
GAATTCGGCC TTCATGGCCT AAATTCAGC AATACAGCTC TCACATACAT AAATTATAAA      60
ATAATTTTAT TTAAGGTGAT GAAATTTATA AGCAGGTTCA AAAATATAAT AAAA          114
```

(2) INFORMATION FOR SEQ ID NO:1166:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1166:

```

GAATTCGGCC TTCATGGCCT AGTCAGCAAC ACCCAACACT GTCTGTTTTC CATTGTGTGG      60
TTTTAATCAT AAAATTGTCA AGTGATTCGT GTTTGTACTT TATTTTITG TGCCTTCTGA      120
AAGGATCTAA AACAAAAATA TTTGCTCTT TTTTCCCCAC GTGTATCTGA ACATTAAGCA      180
GATTGGCTCA GACACAATGA AAAGGATAAT CCAATGTACG TGCTGGTGCA CTCGTGCTAGT      240
TGTTATCTCT GTAGGGCTCA GGAAGCTGGA AGGAGGAAGG GAGGGTAAGT GGCCTGGTGA      300
GTGGAGGTGG CTCGAG                                     316

```

(2) INFORMATION FOR SEQ ID NO:1167:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 300 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1167:

```

GAATTCGGCC TTCATGGCCT AGGTACCAAT AATTCTTCA CTCTCTCAAC TGCTCTCTTC      60
AATTGTGATT CTGCTCTGTT CTGAGCATCT TCCACAGTGA TTAGTACATG TAAATCTTCA      120
TTTAGATGCT CCCAATTGGG CTGCTCTCTA TTTTGCTCCT CCTTTTITTT ATCCCTCATT      180
GAGCCTTTGC CTCGGACCAT GATTTTACAT CCGGTTTCTG CTTCAGTTG TTTGGCTGTA      240
AGTCCTCTAG GTCCAAGGAT TCTCCAACA AAATTAAACT TCGTCCAGCA GCCGCTCGAG      300

```

(2) INFORMATION FOR SEQ ID NO:1168:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1168:

```

GAATTCGGCC TTCATGGCCT ACCTTCACAG AAAAATGCAT AGCTGGATGC TGCAGACTCT      60
AGCGTTTGCT GTAACATCTC TCGTCCTTTC GTGTGCAGAA ACCATCGATT ATTATGGGGA      120
AATCTGTGAC AATGCATGTC CTTGTGAGGA AAAGGACGGC ATTTTAACTG TGAGCTGTGA      180
AAACCGGGGG ATCATCAGTC TCTCTGAAAT TAGCCCCCCC GATCTCGAG                229

```

(2) INFORMATION FOR SEQ ID NO:1169:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 348 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1169:

```

GAATTCGGCC TTCATGGCCT AGTGCTGGGA GCGCAGCCGG CGGGCGAGGC TGCTGGAAC      60
GTGGAGCTGC TGGAGCTGTC CGGCTGACCT GGAAAGTTCT TTGGCTCTA GGCTTACCT      120

```

```

GGAGGCCTCT TCCTTCAGCT CCTTGTTTTT CCGCACCTCC TCGGCGTGCT TGTCTTCTC      180
TTGCAGCCGT TCCAACATGG CGGCGAGGTG GGCCTCCCTG TTCTCCTTGT TGGATTCCAT      240
CTTCTGGGCC AGTTTTTCCT TAGCCATCTT GATGAAGTTG TTGTTTTCTT CAATGGCCTT      300
TTGGATCACC TCTCTCTCAT GTTCCCGGAA TTCTAGACCT GCCTCGAG                      348

```

(2) INFORMATION FOR SEQ ID NO:1170:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 81 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1170:

```

GGCTTTTTC AAATTGCTCT GGCTACCATA TAGAAAATTG ACTGAAGGAG GGCCAAGATG      60
GAAACAGAGA GGACGCTCGA G                                              81

```

(2) INFORMATION FOR SEQ ID NO:1171:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1171:

```

GAATCTGAG GGACTAACTA CGACCATGAG ATTGGCAGTG ATTTGCTTTT GCCTATTTGG      60
CATTGCCCTCC TCCCTCCCGG TGAAAGTGAC TGATTCTGGC AGCTCAGAGG AGAAGAAGCT      120
TTACAGCCTG CACCCAGATC CTATAGCCAC ATGGCTGGTG CCTGACCCAT CTCAGAAGCA      180
GAATCTCCTT GCGCCACAGA ATGCTGTGTC CTCTGAAGAA AAGGATGACT TTAAGCAAGA      240
AACTCTTCCA AGCAATTCCA ATGAAAGCCA TGACCACATG GACGACGATG ATGACGATGA      300
TGATGACGAT GGAGACCATG CAGAGAACGA GGATTCTGTG GACTCGGATG AATCTGACGA      360
ATCTCACCAT TCCGATGAGT CTGATGAGAC CTTCACTGCT AGTACACAAG CAGTCGAG      418

```

(2) INFORMATION FOR SEQ ID NO:1172:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1172:

```

GAAAACAGCA CTGCATGTCT TTGGCAAGCC ACAAGTTTCA TAGATACAGC TGTGCTCACT      60
GCAGAAAGCC TTTTCATAAG ATAGAAACAT TGTACCGACA TTGCCAAGAT GAGCATGACA      120
ATGAGATAAA GATTAAATAC TTCTGTGGGC TTTGTGATCT TATCTTTAAT GTGGAAGAAG      180
CATTTTGTAG TCATTATGAG GAGCACCACA GCATAGATTA TGTATTTGTG TCAGAAAAAA      240
CTGAAACTTC AATTAAAACC GAAGATGATT TTCCAGTAAT AGAGACCACT AACCAAGTTAA      300
CTTGTGGTTG CCGTGAGAGT TACATCTGTA AAGTCAACAG AAAAGAAGAT TATAGCAGAT      360
GTCTCCAAAT CATGCTGGAT AAAGGAAAC TGTGGTTTCG CTGCAGTTTA GTTCCGGCAA      420

```

CAGCACTCGA G

431

(2) INFORMATION FOR SEQ ID NO:1173:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1173:

```

GAATTCGGCC TTCATGGCCT ACCCCTTAAA GGAAAGAATG GCTGCTCTAG AAGAAAAGAA      60
TGTTTAAATT CAAGAATCAG AAACCTTCAG AAAGAATCTT GAAGAATCTT TACATGATAA      120
GGAAAGATTA GCAGAAGAAA TTGAAAAGCT GAGATCTGAA CTTGACCAAT TGAAGAAATGAG      180
AACTGGCTCT TTAAT.GAAC CCACAATACC AAGAACTCAT CTAGACACCT CAGCTGAGTT      240
GCGGTACTCA GTGGGATCCC TAGTGGACAG CCAGTCTGAT TACAGAACAA CTAAAGTAAT      300
AAGAAAACCA AAACCTCGAG                                     319

```

(2) INFORMATION FOR SEQ ID NO:1174:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 171 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1174:

```

GAATTCGGCC TTCATGGCCT ACTTAATATA TTTGTGAGAT AATTATTGAG ACATTTTATT      60
AATATTTTAT TTAGTCTTAG AATTCAGAG AAAAGTGAAC CTAGAGAGGT ACTTCTCCTG      120
GTTCAAAC TGACATGAA AATTCTGAAT TTAAGTAACT GGATCCTCGA G                  171

```

(2) INFORMATION FOR SEQ ID NO:1175:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1175:

```

GAATTCGGCC TTCATGGCCT AAGGAAACAA AAAGCTAAGG GCAAAATGTA CAACTTAGA      60
AGAATTGGAA GATAGAAACA AGATAGAAAA TGAAAATATT GTCAAGAGTT TCAGATAGAA      120
AATGAAAAAC AAGCTAAGAC AAGTATTGGA GAAGTATAGA AGATAGAAAA ATATAAAGCC      180
AAAAATTGGA TAAATAGCA CTGAAAAAAT GAGGAAATTA TTGGTAACCA ATTTATTTTA      240
AAAGCCCATC AATTTAATTT CTGGTGGTGC AGAAGTAGA AGGTAAAGCT TGAGAAGATG      300
AGGGTGTTTA CGTAGACCAG AACCAATTTA GAAGAATACT TGAAGCTAGA AGGGGAAGGA      360
CTCGAG                                     366

```

(2) INFORMATION FOR SEQ ID NO:1176:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 222 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1176:

```
GAATTCGGCC TTCAGGCCTA CAAGAATTTT ATGCCATCCA AGAGTATTAG CACAAATAAA   60
TAAAGGCAAT TTGTAAATTT TTTCCCTGAA AATCTAAAAA ACAAGAAAAC TATCTCTTCA   120
GGGTGATTAT AATTAGGTCT ATGAGACTCT CAAGGTCCTT TTAGTGATTC AGAATCTATA   180
GTTGGAATA CTTATTTTAA AATGTTCAGG CAGTTGCTCG AG                222
```

(2) INFORMATION FOR SEQ ID NO:1177:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1177:

```
GAATTGTCCA CAGCCTGTCA TGCCGCACAA CTGTCCACGC TCGGTTCTCT CGGATATCAC   60
AGTACACTAC AAATGGCTTC AGGGGGCCAC TGCCATCAGG ATCAATGGTG AAGTTTCCAG   120
AAGTTTTCCT ACTGAGCCGA TAAGCCTCAC AGGATTCCTT ATACAAAGGT GTGTGGCAGG   180
TCTCTCCCTT GTAGCCCGTC AGTTCGCAGT AGCAAATGAA GTCATCCCAA GACTGGTAGC   240
AGCGTCCATC ATGCTCACAC ATGTTAGGGC TGCACCTATC AGTGATGCCA CATGTATCAA   300
AGAGGACCTC AGCATAGAAT CCAAGCCGCC GGCCCTCCAC CAGAGTCAGG TTGACCAAGT   360
GACCCGAG
```

(2) INFORMATION FOR SEQ ID NO:1178:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1178:

```
GAATTTAGAA CGGGTACAAA AGGACCTAAG CCAAACACAG TGTCAAATGA AGGAAATGGA   60
ACAAAAGTAT CAAAATGAAC AAGTTAAAGT GAATAAATAC ATTGGAAAGC AGGAGTCTGT   120
AGAGGAGAGA TTGTCTCAAC TACAAAGTGA GAATATGTTG CTTGACAAAC AACTGGATGA   180
TGCCCAAC AAGGCTGACA ATAAAGAGAA GACAGTGATT AATATCCAAG ACCAGTTTCA   240
TGCTATTGTG CAAAACCTT CAGCTGAGAG TGAAAAGCAA AGTCTTCTGC TAGAAGAAAG   300
AAATAAGGAG TTAATCAGTG AATGTAATCA CTTAAAAGAA AGACAGTATC AATATGAAAA   360
TCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1179:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 247 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1179:

GAAACCGAAA GTGGAAATGT ACTCTGGGAG TGATGATGAT GATGATTTTA ACAAACCTCC	60
TAAAAAAGCT AAAGGGAAAG CTCAAAAATC APATAAGAAG TGGGATGGGT CAGAGGAGGA	120
TGAGGATAAC AGTAAAAA TTAAGAGCG TTCAAGAATA AATTCCTCTG GTGAAAGTGG	180
TGATGAATCA GATGAATTTT TGCAATCTAG AAAAGGACAG AAAAAAATC AGAAAAACAA	240
GCTCGAG	247

(2) INFORMATION FOR SEQ ID NO:1180:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 149 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1180:

GAATTCGGCC TTCATGGCCT ACGAGTTCTT CATGCTTGTT GTTGAGATTT GAGATGTTTA	60
TTGGTAACAT TGTCTTTTTT CCATCCTTTT TTTTCTTTCC TAACCTGGTT TCTTCCAGTG	120
CAACTGCAGA TAGAAGACCT GACCTCGAG	149

(2) INFORMATION FOR SEQ ID NO:1181:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 251 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1181:

GAATTCGGCC TTCATGGCCT AGAAAATTAA ACTGTTTTTT AAACCAGGTG TTCACITTTT	60
ATTGATTTTT GCATAGTACT TGGTGAACCC TATTGATTTT TAGATTCAGG TAATTTTTCA	120
GTGTGAAAGA GTTTTTCTGT TATATCTTCA CTGTGATATC CATTCCATTC CCTTCTCAGT	180
TAATACTCAG TTTAGCTCTA GTATCTGTCT CTCAAATTAT GTTTAATTGC TTTTATCACT	240
TTGTCCTCGA G	251

(2) INFORMATION FOR SEQ ID NO:1182:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 176 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1182:

GAATTCTAGA CCTGCCTAGA GTGCTCTGTG TATGCGGATG ATTTAGAATT GTCATTCTC 60
 TTTACTGGAT GTTTATTTAT AAAGATCTGG CCTGTTCCCTG CGTCTGCGGA GCGGCCCTTG 120
 TCTCCAGCT ATCTATAACC TTAGCTAGAG TGTCGCCTTG TGGGTTCCCT CTCGAG 176

(2) INFORMATION FOR SEQ ID NO:1183:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 410 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1183:

GAATTTAGAA TTCTTGACGG GTTCTCGGGG GTTCCTGTTG TATAAAGGCC TTCATTACTT 60
 TAGTTATACC CAAGTGAAAG GGGCATTAC CTCGTGACAA GTGGATTATA GGAGAAAAAG 120
 AGGAGATGGT AGGTCAGAGT GTGCTTAGAA GTCATGCCCA GTGTTCTCAT CAATGCCAGA 180
 CATTACGGGC TGCCCTTCCA TCAGCCATTC TACCTTTCTT CCTGCTAACA ATATCCCAAT 240
 TTTGTTTCAAG TATCAGGCCA CTTAATATGT TTCAGGGAAA ACTGGTTCCA GCCCAGAGCA 300
 GTGTGGACCT TGATTACATC AAATAATCA TGGTGAGTCC ATTTTCCTTG CCAGAAATTC 360
 GTTTAGGAGT GGACATGTAT TCACTTGTG AGTACACAAG ACGACTCGAG 410

(2) INFORMATION FOR SEQ ID NO:1184:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 286 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1184:

GGAAACAGAC AGTACCAAGG AAGAAGCAGC TAAGATGGAA AAGGAATATG GAAGCTTGAA 60
 GGATTCCACA AAAGATGATA ACTCCAACCC AGGAGGAAAG ACAGATGAAC CCAAAGGAAA 120
 AACAGAAGCC TATTTGAAG CCATCAGAAA AAATATTGAA TGGTTGAAGA AACATGACAA 180
 AAAGGGAAAT AAAGAAGATT ATGACCTTTC AAAGATGAGA GACTTCATCA ATAAACAAGC 240
 TGATGCTTAT GTGGAGAAAG GCATCCTTGA CAAGGAAGGG CTCGAG 286

(2) INFORMATION FOR SEQ ID NO:1185:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 417 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1185:

GCGATTGAAT TCTAGACCTG CCTCACCTTA CCCAGGACT CCGCTATGAC ACCGCCTCTG 60
 CCCCTACAAG ACACAGATCT CTCGTACGCC CCAAAGCCTG TGGCTGCAGC CACGATTGTG 120
 TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCAGGACT CCGCTATGAC ACCGCCTCTG 180
 CCCCTACAAG ACACAGATCT CTCGTACGCC CCAAAGCCTG TGGCTGCAGC CACGCCTGTG 240

TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACCGCTCTCTG 300
 CCCCTACAAG ACACAGATCT CTCGTCAGCC CCAAAGCCTG TGGCTGCAGC CACGCTTGTC 360
 TCCCAGCAGG CTGAAGAGGG CCTCACCTTA CCCCAGGACT CCGCTATGAC ACTCGAG 417

(2) INFORMATION FOR SEQ ID NO:1186:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 260 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1186:

GGAAGGGGCT TTTACAACTT CCTTTTGTTT CCAGGCGTTA GTATCTCTGC TTGGTATAAG 60
 ATACCAAGTAT TCCTAGGAAA GGCCTTGAAA AGAGGGACAG ATACAAGCCT CTTCGTGAAAA 120
 ATCTATGCTT TTCTTACCTC TACCAAGTAA TAGCAAACAT GAAAATGGTA AAGATCTTTA 180
 CAACATTGTG CTCTGTACAT ATAAAACGTT TAAACACATG CGCAAAGATG GAGCAAAATA 240
 TCATAGAAAA TAATCTCGAG 260

(2) INFORMATION FOR SEQ ID NO:1187:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 337 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1187:

GAATTCGGCC TTCATGGCCT ACAAGGAAAT GCCCAAGGAA AAACGTGAGC TTCAGTTTCG 60
 GCGAAAGGTC TTAGCAGTCA CAGACTCACC TGCCAGGAAG GGCAAGGACT CTCCTCTTAA 120
 GCAGAGCCCT GGGGAGTCCA CGAAGAAGCA GGATGGCCTA GTCCAGATTG CACCAAACTT 180
 GACTGTGATC CAGTTCATTA AAGTCTTCCC CAGGGTGCTG CTGCAGACCC TACGCCACCC 240
 CATCTTCCTG CTGGTGGTCC TGTCCCAGGT ATGCTTGTC A TCCATGGCTG CGGGCATGGC 300
 CACCTTCCTG CCCAAGTTCC TGGAGCGCCA GCTCGAG 337

(2) INFORMATION FOR SEQ ID NO:1188:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 537 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1188:

GAATTGGCCT TCATGGCCTA CGAGGCGTCA CTGATCTTAA CGAGACTTCC AAATCGTCTC 60
 AGCAGGGGCT CCAGACTTCC CCAGCAGGCG GCAGGTTTCC TGTCATGCTT TCGCCTTCCT 120
 TCTCATATAC ACCAGTGCTA GAGTTCATCA TGTGTCAAAA TTGTATCTTG CTTCCTGTTT 180
 TCAAGATGAT CTAATAGTTG TCTTATCTCA GCATCATACT CCACCCATTC TGGGACAATT 240
 CTGGCAGCAG CTTTGTAGTT GGATTCCTTT GTTTTGGGAT TATTGCACAG ATCAATTGTT 300
 TTGGCCCTCC TTGGACTAAC CACATACAAA TATGAATCTG GCTGCAAGAA CAGGATATCC 360

AGGTAAGTAG AGAGTGGGCA TTGATAAAAA TATCTGGTGG AGAAGCCTAG GATTTCAACT 420
 TTTTGTGAGA GGATTCCTGT TGGGACAGCT TTACCAGAAA AGAATAATAG CGGATATGTT 480
 CATCCAACT AAGAACTTTC ATGCATCTTG CATTGTTACA TAGCCTGTGG ACTCGAG 537

(2) INFORMATION FOR SEQ ID NO:1189:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 65 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1189:

GAATTCGGCC TTCGTGGCCT AATTGAATTC TAGACCTGCC TCGAGGATTC AATTAGGCCA 60
 TCGAG 65

(2) INFORMATION FOR SEQ ID NO:1190:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 398 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1190:

GAATTCGGCT TCATGGCCTA ACTTTATGTC ATAAACTGA TTAAATAAT CTTGAAATGG 60
 CCATTAAGGA AGATCAGATT GCAGATAACT TTCAAGGAAT ATCAGGTCTC AAAGAAGACA 120
 GCACAAGTAT AAAAGGTAAT TCAGACCAGG ATTCTTTTCT TCATGAGAAT TCGTTACACC 180
 AAGAAGAGAG TCAAAAAGAA AATATGCCTT GTGGGGAAC AGCAGAATTT AAACAAAAGC 240
 AAAGTGTTAA CAAAGGAAAA CAAGGAAAGG AGCAAAATCA GGAATCACAG ACAGAGGCAG 300
 AAGAGCTACG CAACTTTGG AAAACCCATA CTATGCAACA AACTAAACAG CAAAGGGAAA 360
 ATATTCAACA AGTGTACAA AAAGAAGCTA AACTCGAG 398

(2) INFORMATION FOR SEQ ID NO:1191:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1191:

GAATTCGGCC TTCATGGCCT AGCCATTGTT TATACATTAT TGCTGTCACT ATTCACCAAG 60
 ATGGTGCTAT TACCTGTTGT GGGGCAATTT TCCTTGTCAT TTCTACATAT CTGGAACAG 120
 CTTTGTCTT TATATTTCA AGAATGTTCT AAAGCAGACA GCCTTGAGG AGAGACAGAT 180
 AGTGACTCCC TCCAGGGAAA AAGTCGATT TGTGTGCTCC CTGCCTCGA G 231

(2) INFORMATION FOR SEQ ID NO:1192:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1192:

```
GAATTCGGCC TTCATGGCCT AACTAACCG CAGCATGGCG GATCTGAAGC ACAGCAGCTT    60
GCGGTACGAG CTCGAGCAG ATCTGGAGGA AGAAAGAATG CGGCAGAAAA TAGCAGAAAAG    120
GACCTCAGAA GAAACAATAC GCATTTACTC TTGAGACTG TTTTGAACT GTATTGTTCT    180
GGCTGTTTGA GGGGCATGCT TTTATGCAAT ATACGTAGCA ACTGTCTTCT CGCAAGAGCA    240
CATGAAAAAG GAAATCCTCG AG                                         262
```

(2) INFORMATION FOR SEQ ID NO:1193:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 381 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1193:

```
GAATTCGGCC TTCATGGCCT AGAGGAAATT GCTAATGTAA CAGAGACATC AGATCCAGAA    60
TTCCAACGAA CCTGAATGAG CCCTGGTGTG GAACAGCCGT GAGCCTGTCC ACGTTTTTCT    120
CCTGATCTCT GCTTTTCATT AGTAATGAAT TTCCACTCCT TCTCCCCTTT CATGACAAAT    180
CAGTACAGTG AATGTAATTG CCACATCCAG CGATGCATCA TCTTCCCACT TTTCTAGGCT    240
GCAGAGAAGG AAGCAGCCCT TGTGCAGCAA GAAGAAGAAA AGGCTGAACA ACGGAAAAGA    300
GCTCGGGCTG AGAAGAAAGC GTTAAAAAAG AAGAAAAAGA TCAGAGGCCC AGAGAAGCGC    360
GGAGCAGATG ATGGACTCGA G                                         381
```

(2) INFORMATION FOR SEQ ID NO:1194:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 294 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1194:

```
GCGATTGAAT TCTAGACCTG CCTCTCTTAC CCTTGGCTTA CTAATATATT CTTAGTGGCA    60
TTTCATTTGG TGGTACTGGT GCGCATTC AAGAGGACAC TTGTATCTGA GTGAGCAGCT    120
GGAGCAGTAA GAATGACAAC ACTTGGTCTC TGCAGATTGG CTGGACCCAC CACTCTGGTG    180
CTAGTGCTGG CTTGGTGGCT GAGGGAACAA GCAGGAAGTA GAAGAGGAAA TGAGATGTGG    240
GTGGAGTGGG AAGAGAGGAC AGATTGGGGA GGGGAGGGAA AGTGCAAACT CGAG         294
```

(2) INFORMATION FOR SEQ ID NO:1195:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1195:

```

GCGATTGAAG TCATTGCCAC GCCTACTAGT TTGCACTAAA GGAAAGTCAG TTTGGTATGA      60
ATTACAATGG CCAACGTTAC ATTCTCCTCC GTTTTGTTTT TTTTITTTAA TCTCAATTC      120
TCTTACTTTT CTTATTCCCC CTATGCTGAT GCCAATCAGT TTCTTTTGGG AAAGTTTAA      180
CAGATCGGTT TTATGTTTTG AAGTACAGCA AGTATTTCAT CCTCTCTTTA AAATACAAAA      240
CCCAGAAACC CAGGAGCTCG AG                                         262

```

(2) INFORMATION FOR SEQ ID NO:1196:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1196:

```

GAATTCGGCT TCATGGCCTA GACCGTCTCA AAGAAAACAC ATATACCTTT TGCTCAGATT      60
ATTGTTAAAT TTTACCTCAT TTACTTTATC AATTGCTCTT TCTCTATTTA TGTGTATCAG      120
ATTATGTTA AATGTTACCT TATTTGCCTT ATCAATTGCT CTCTTTATGT ATGTTTGTGT      180
GTACTGTTGC ACATGCAAAT GCACACAAAT ATATGTTTCT GAATTTTTTG AGAGTAGATT      240
GCATACATTA TGGGACCTGC CTCGAG                                         266

```

(2) INFORMATION FOR SEQ ID NO:1197:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 232 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1197:

```

GAATTCGGCC TTCATGGCCT AAGAAACACT TTAAAAAATC TTTCCTAGT TATTTGTAC      60
ATAGATAAGA TAGTTGATTC CCAGCTTTTA TCTGTAAAGT TGTCATAATT GGAATTAAC      120
TCGGTGATTC TGTGTATAA AACATTGTTA TATTTTATAG TGTGTGCGGA TTTTAGGCAA      180
ACAAGAAAAT ATTAGAGTGA TGCAATTGGC TTGTTCCAG GGGATGCTCG AG              232

```

(2) INFORMATION FOR SEQ ID NO:1198:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1198:

```

GACCTTTACC ACTAAGTGA GCCAACTTTA GCACCTTGCT AATGAATCTG GGTCTGAGA      60
ATTGTGCAAC ACTGCTGCTC TTGTTTTTAC TTGAGAGTAA AATTCTGCTG CATTCTCTTA      120
GGCCAGCTGT CTTGACTGGG GTAGCTGAAG CTGTTGTAGC TATGATCTTT CCATTTCAGT      180
GGCAATGCCC ATATATTCCC CTTGTCTCTC TTCACTGGC TGCAGTGCTT AGTGCACCTT      240
TACCATTAT  AGTTGGAGTT GACTCAAGGT ATTTTGATCT TCATGACCCA CCAAGGCTCG      300
AG                                                                                   302

```

(2) INFORMATION FOR SEQ ID NO:1199:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 231 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1199:

```

GCCACTGCTC CTGGCCAGGA CTCTCTTATT AGGTTTGACA TTCAAGAGT TTAGAAATTA      60
CCTTCCAGAA TTCACAGGTA AAAGCCAGAC CTCTCCTTGG TGAAGATACA ATTCTTTACA      120
ATTTTACAAT AGTTAAGTAT ATTTTATCAG TCTATATTGG CTGTTTAGTT GACAAACCGT      180
TAAAATTGG  TGACAGTCCA GATGTGGTCA CTCATGCCTC TAATCCTCGA G                231

```

(2) INFORMATION FOR SEQ ID NO:1200:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 235 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1200:

```

GAATTCTAGG CCTGACCCAG CCCCCATGGC TTCAGAAGAG CTACAGAAAG ATCTAGAAGA      60
GGTAAAGGTG TTGCTGGAAA AGGCTACTAG GAAAAGAGTA CGTGATGCCC TTACAGCTGA      120
AAAATCCAAG ATTGAGACAG AAATCAAGAA CAAGATGCAA CAGAAATCAC AGAAGAAAGC      180
AGAACTTCTT GATAATGAAA AACCAGCTGC TGTGGTTGCT CCCATCACTC TCGAG          235

```

(2) INFORMATION FOR SEQ ID NO:1201:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 119 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1201:

```

GAATGAGAGG TCAGAGTATT CCATTGCACA CGCACCTGGG GGCTGACAGA CTGTGCCCC      60
CTAGCCTTCA TGCATGCCCA AGCACTGGCA GCTTTGCAGC CCTGCCCCA CGACTCGAG      119

```

(2) INFORMATION FOR SEQ ID NO:1202:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1202:

```
GATTGAATTC TAGACCTGCC TCGAGATCTT TTGAGCACTT TCCCCCATCC CCAGGGCCAC      60
AGATCCCCTT CCTTACTTGT TGGGGGGAGG TCTGGAGCAC CTCGCCAATG CCCTTCCCCC      120
ATCCGGCTGG GTCCTTCCAG TTATTTATTT GTGTATTAT TTATTTATCT ATTTATTATT      180
CTATTTAATC TCTTGGCCTC ACCCAGGGAC CGTCTGGCTT CCCCAGCTGG ACTGGGAGGT      240
CAGGAAGCCA GGCAAGGAGA GGGACAGCAC AGGCCACAGA GGGCTGCCCC CACCACACAC      300
ACCCCGCGT CTCGGGAGAA ACCCACCCTC TTCAGAGCCT GCACTCGCTA AGGAAGGGGA      360
CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1203:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1203:

```
GGTGAGATGG AAAAGGAGTT TCCTGAGCTT ATCCGAAGTG TTGGTTTACT TACGGTAGCT      60
GCTGACTCTA TCTCTACCAA TGGCAGTGAA GCAGTTACTG AGGAGGTATC TCAAGTATCT      120
CTCTCAGTAG ACGACAAAGG TGGATGTGAG GAAGACAATG CTTCTGCAGT CGAAGAGCAA      180
CCAGGCTTAA CACTGGGGGT GTCATCATCT TCAGGAGAAG CTCTGACAAA TGCTGTTCAA      240
CCCTCCTCTG AGACTGTGCA GCAAGAATCC AGTTCTCTCT CCCATCATGA TGCAAGAAGT      300
CAGCAGCCTG TTCCTTGTA AAATGCAACC CCCAACTCG AG                      342
```

(2) INFORMATION FOR SEQ ID NO:1204:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 645 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1204:

```
GAATTCGGCT TCATGGCCTA CGTCTTCTA ACTATCTATG GGGTGGAGCT GTTCCTGAAG      60
GTTGCCGGCC TGGGCCCTGT GGAGTACTTG TCTCCGGAT GGAACCTGTT TGACTTCTCC      120
GTGACAGTGT TCGCCTTCCT GGGACTGCTG GCGCTGGCCC TCAACATGGA GCCCTTCTAT      180
TTCATCGTGG TCCTGGCCCC CCTCCAGCTG CTGAGGTTGT TTAAGTTGAA GGAGCGCTAC      240
CGCAACGTGC TGGACACCAT GTTCGAGCTG CTGCCCCGGA TGGCCAGCCT GGGCCTCACC      300
CTGCTCATCT TTTACTACTC CTTCCGCATC GTGGGCATGG AGTTCCTCTG CGGGATCGTC      360
TTCCCCAACT GCTGCAACAC GAGTACAGTG GCAGATGCCT ACCGCTGGCG CAACCACACC      420
GTGGGCAACA GGACCGTGGT GGAGGAAGGC TACTATTATC TCAATAATTT TGACACATC      480
CTCAACAGCT TTGTGACCCT GTTTGAGCTC ACAGTTGTCA ACAACTGGTA CATCATCATG      540
GAAGGCGTCA CCTCTCAGAC CTCCCCTGG AGCCGCTCT ACTTCATGAC CTTTACATT      600
GTGACCATGG TGGTGATGAC GATCATTGTC GCCTTTATCC TCGAG                      645
```

(2) INFORMATION FOR SEQ ID NO:1205:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1205:

```

GAATTCGGCC TTCATGGCCT ACAGTACACA AGTGCTAGCC CTAGCAGCTC GCGATGTGCT      60
TCAGCAGAGC AGACGCTGCG GATAACTACC CTTTGGGAAC ATGTCAACAG AGGAAACTTT      120
TTCCTCACTT CCATCCCCCG AATTGTGATT GGAACAAGTT TGTCCCTCTT AGGGGATCAC      180
CCCACAGAGG GCCTGGGTGT TATTTTTCAG ATGGATATGG CTTGGCATA CACTTATCTA      240
AGATCCCAAC CAGTATAAAA GGATATACTT TGGGAGCCAG AACAGCTGTG AGGTTTAAGC      300
CAATACAGAA GGAAATGACA CCTCATGCAG GCAGGT                                     336

```

(2) INFORMATION FOR SEQ ID NO:1206:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1206:

```

GGAAATCTG AACAAACAAC CGAATAAGCA GTGGAAGAAA TCACAAACAT CTACAAATCC      60
AAAAGCTGCT CTCAAGTCTA AGATAGTTGC TGAATTTGCA TCTCAGGCCC TAATTGAAGA      120
GCTGTTGCTA TACAAGCGCT CAGAAGATCA GATAGAAGTG AAGGAAAAGC AGTTGTCAAC      180
TATCAGGGTG GATGTGTGCA GCACAGAAAC TCTCAAATGC TTAAAAGATA AACAGGTGG      240
GAAGAAGTTC TCCAAGAAT TTGAAGAGGC AAGCTCCAAG CTGGAAGAAT TTGTGAATGG      300
ATCACTCGA                                     309

```

(2) INFORMATION FOR SEQ ID NO:1207:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1207:

```

GAATTCGGCC TTCATGGCCT ACAGCTTTTG AGCGGAAACC TGAAAGAAGG TTTGCAGTAT      60
CTTCAGAGTC TGAATTTTGA GCGGATAGTG ATGAGCCAGC TAAATCCCCT GAAGATTGTC      120
CTGCCCTCAG TGGTTAACTT TTTTGCTGCA ATCACAATA AGTACCAGCT CGTCTTCTGC      180
TACACCATCA TTGAGAGGAA CAATCGCCAG ATGCTGCCAG TCATTAGGAG TACCGCTGGA      240
GGAGACTCAG TGCAGATCTG CACAAACCGG CTGGACACCT TCTTCCCCTT TGATCCCTGT      300
GTGCTGAAGA GGTAGGTACT TTAAACGTT GACATCTCGA G                                     341

```

(2) INFORMATION FOR SEQ ID NO:1208:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 588 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1208:

```

GAATTCGGCC TTCATGGCCT ANCGAGCGGC AGGTGTGCAC AGAGGTNCTC CACTTTGTNT      60
TCTGAACTCG CGGTCAGGAT GGTTTTCTCT GTCAGGCAGT GTGGCCATGT TGGCAGAAGT      120
GAAGAAGTTT TACTGACGTT CAAGATATTC CTTGTCATCA TTTGTCTTCA TGCTNTNCTG      180
GTAACATCCC TGAAGAAGA TACTGATAAT TCCAGTTTGT CACCACCACC TGCTAAATTA      240
TCTGTTGTCA GTTTTGCCCC CTCCTCCAAT GGTACTCCAG AGGTTGAAAC AACAAAGCCTC      300
AATGATGTTA CTTTAAGCTT ACTCCCTTCA AACGAAACAG AAAAACTAA AATCACTATA      360
GTAAAAACCT TCAATGCATC AGGCGTCAAA CCCAGAGAA ATATCTGCAA TTGTTCATCT      420
ATTGCAATG ACTCAGCATT TTTAGAGGT GAGATCATGT TTCAATATGA TAAAGAAAGC      480
ACTGTTCCCC AGAATCAACA TATAACGAAT GGCACCTTAA CTGGAGTCCT GTCTCTAAGT      540
GAATTAAAC GCTCAGAGCT CAACAAACC CTGCAACCC TACTCGAG      588

```

(2) INFORMATION FOR SEQ ID NO:1209:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 418 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1209:

```

GAATTCGGCC TTCATGGCCT ACAAGGATAG AATTCATTCC ACCTATATGT ACTTAGCAGG      60
GAGTATTGGT TTAACAGCTT TGTCTGCCAT AGCAATCAGC AGAACGCCTG TTCTCATGAA      120
CTTCATGATG AGAGGCTCTT GGGTGACAAT TGGTGTGACC TTTGCAGCCA TGTTTGGAGC      180
TGGAAATGCTG GTACGATCAA TACCATATGA CCAGAGCCCA GGCCCAAAGC ATCTTGCTTG      240
GTTGCTACAT TCTGGTGTGA TGGGTGCAST GGTGGCTCCT CTGACAATAT TAGGGGGTCC      300
TCTTCTCATC AGAGCTGCAT GGTACACAGC TGGCATTGTG GGAGGCCTCT CCACTGTGGC      360
CATGTGTGCG CCCAGTGAAA AGTTTCTGAA CATGGGTGCA CCCAGGGGAG TGCTCGAG      418

```

(2) INFORMATION FOR SEQ ID NO:1210:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 379 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1210:

```

GAATTCGGCC TTCATGGCCT AGGTGCAAC TGCCACGCAG CAACTGCCAC GCAGAAAAAG      60
GAGGGGTTGA AAAGGGAGTA GCTTCTGATA TTCAGAAGCT ATTGGAAGAG ATGCTCAAAG      120
AAGAAAAAAT TACCATAATC CAATAAAGAA GAAGACCTGA GATCCAGGAA GCAGATGATC      180
TGAAGTGCAG AGAAAGTTCA GGAAGTTCC CTCATTATG ATGATGGGAA ATAACAGTAA      240
ATTCTGTACA GCAGTCTTGG ACAACAACCA ATCTAAACTG GCACAGTGCA GAGGCAATCA      300
ACAGAGAACA TAATATTGAT AGAATGCCTG ACGCTTTTGA TTGTATTAC AGGAAACATA      360

```

AACAAATTGGA AAACCTCGAG

379

(2) INFORMATION FOR SEQ ID NO:1211:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 380 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1211:

GAATTCGGCC TTCATGGCCT AGAAACAGGG TATTATTTAT CCTCTTAGCA TATGTTTTGT	60
AATGATTCTG TTACATCAGA GCTTCTCTTG ATGAGTGCCA CTAAAGTGAG ATTGTTGATG	120
AGGATTGGCC TTATTTTTTT GTGGTCTAT TCAATACTG CCACAGCATT TATTTCTAA	180
AACATTTCTA CGGTCTATAC TTATCACTGT CTGATCACAT GCAGGCACCTG GTCAAGGTGG	240
AGCATGGTCG AGGCGTTCTT ACTGATACAA ACTCGTGCCT TCTCTGGAC ACAAGGAGCC	300
CATGTTCTGG TTAACCTCTGT GTTCATTTAT TTCACTTGTC ATGCATCGCC TCTATCTTCT	360
CCCTTTATTG CGTCCTCGAG	380

(2) INFORMATION FOR SEQ ID NO:1212:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1212:

GAATTCGGCC TTCATGGCCT AGTGAAGGGT ATTGGTGGTG TTTTTTCCCC TTTACCTCTC	60
ATTTGGGCAT TTAAATAG GAGGCCAACT TCATTTACTC CTGTTTAGTA AATCTAAATG	120
AGTGTAGGTT TTAAATTAGA TTTTTCCTCA AAACCTTCA GAAGGTCTAG TATTAGGGCA	180
GTTGATAAGT AAGTGAAGC ACCTTGGGCA GGACCCAGTG ACCTGTCCTT TTAATTATTA	240
CAGCACCTGC ACGGGAAGCA GATCTGGAGG ATGAAATTTA ACCTGTTACA GTGTGTGTAT	300
GTTTTAGGGT GTGTGTTTTC CGAATACTGT GGGGAGTTCC CTTTTTCCTT CTCCCATGAT	360
GGATTCTTTT GTCTTTCTAG AGATAACATA GGAGGATATC TGGATTTTTC ACCTAAGGCA	420
GTGTCTCGAG	430

(2) INFORMATION FOR SEQ ID NO:1213:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1213:

CTCGAGTCTC TCCTGTTAAT CTCCTATTTA TAAAAGGATC ATGAGGCTGC CAAGTGCTAA	60
AAATGGAGAT GGTCTAGTAA CTAGAAAACCT CCCCACCCCA GGGAGCACAC CTACGTATGT	120
CCCTACAACC TAATAATGTG ATGTGTTTTG GAACACAGAC ATTAGAACTT CATGAAGTTT	180
TAACTGTTGA TTCTTTCCCA AGCATCATCA AGTTATGATT TAGGCAATGT ATGATTGAAA	240

TGCATTCAATT CATCACGCAT AGGCACAATC ACAGAAATAT TGCACAAAAT ATGTCCCTGA 300
 CTGAAACTGA GAGGTACAAA AACGTATTTC ACTCTTCGTA AAGAAGTTTG TGAGGAAATA 360
 CAACTCTGCG ATCGTATAGA CATGTTTCCT GATAATACAC TGACATTAC AAACAGTAGG 420
 CCATGAAGGC CGAATTC 437

(2) INFORMATION FOR SEQ ID NO:1214:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 295 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1214:

GAATTCGGCC TTCATGGCCT AAAAAGAAAT GATGTTTTCT CTCCAACAGT GTGTTTTTAT 60
 TTCTTTCAATC TACCTGTCCA GTAATCATTT TAAAAAGAA AATAGCATTG GTTACTGCCT 120
 GTGTGATGTG GCCCCGGCTT ATCTGCATCT TCCCTCCTGT TFACTGTTCC AGCCACCTCA 180
 GCTTTTTCTC TGTTCTCTA GCATGGCAAG CTTATTCCTG CCTCATGACT CTTTCGCATG 240
 GTGTTTTTAG ATTTTCTCTG TAGCACTCTG CACGCATTGT CCACCTAAAC TCGAG 295

(2) INFORMATION FOR SEQ ID NO:1215:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 265 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1215:

GACCTGCCGC GAGTGTGTT GATAGCTTGC TCAAGATCAC ACAGCTAGTA GGTAGTGAGG 60
 CTAGGATTTA GACTTAAGTA GTTGGTTGTA GAGTCCACGT GTTTAACCAT TACACTACTT 120
 TGATAACAAT ATCATTATTA TTATTATCTT TTTTTTTTTT TTGATACAAA GTCTCACTTT 180
 GTTGCCCAAG CTGGAGTGCA GTGGCATAAT CATGGCTCAC TGCAGCCTCG AACTCCTGGG 240
 CTCAAGGGAT CCCCCACTC TCGAG 265

(2) INFORMATION FOR SEQ ID NO:1216:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 344 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1216:

GAATTCGGCC TTCATGGCCT AAAAGAAGGA GCGCGAGAGA AAAAAGCGAG ATGAAGAAAA 60
 AGCGAAACTG CGGAAGCTGA AAGAAAAAGA AGAGTTAGAA ACAGGTAAAA AGGATCAGAG 120
 TAAACAAAAG GAATCTCAAA GGAAATTGTA AGAAGAAACT GTAAATCCA AAGTGACTGT 180
 TGATACTGGA GTAATTCCTG CCTCTGAAGA GAAAGCAGAG ACTCCCACAG CTGCAGAAGA 240
 TGACAAATGAA GGAGACAAA AGAAGAAAGA TAAGAAGAAA AAGAAAGGAG AAAAGGAAGA 300
 AAAAGAGAAA GAGAAGAAA AAGGACCTAG CAATGCCACT CGAG 344

(2) INFORMATION FOR SEQ ID NO:1217:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 371 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1217:

```

GAATTCGGCC TTCAATGGCCT AGCCATTATT AAGACCTGTG ACAAAACTA TAGACATGAT      60
GCAGTGAAGA TTCTGAAACT CAAGCCTGTG CTGCAGAGAA GTCTCACTCA CCCTCCTACC      120
ATAGCCCCAG AGGGGTCCAG ACCCCAGGGT GGTTCGCCA GCAGCAAGCT AGACAGTGGA      180
TTTGCCAAGA CATCTGTTGC TGCTTCTCTA TACCACACAC CCTCTGACTC CAAGGAAATT      240
ACTCTTACTG TTACTTCAAA GGACCCTGAA AGACCTCCTG TTCATGACCA ACTTCAGGAC      300
CCAGGACTGC TGAAGAGGAT GGGCATTGAG GTCAAAGGAG GAATATTCCT TTGGGATCCA      360
CAACCCTCGA G                                     371

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(2) INFORMATION FOR SEQ ID NO:1218:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 349 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1218:

```

GAATTCTAGA CTCCCGCGCG TACTCGGCGG CCTGAGCGAT ACTAAATGT CTGATGATGC      60
TGGTGACACC TTAGCCACTG GAGACAAAGC AGAAGTTACT GAGATGCCTA ATAGTGATTC      120
TTTACCTGAG GATGCAGAAG TGCATTGTGA TTCAGCTGCA GTTTCACATG AGCCACACCC      180
AGCTGACCCC AGAGGGGAGG GGCATGAAAA TGCAGCTGTG CAGGGTGCGA GGGCTGCCGC      240
CATTGGGCCC CCTGTGCAGC CTCAGGATGC CAACGCCCTG GAGCCCCCTC TCAATGGAGA      300
CGTGACTGAG GATACACTTG CTGAATGTAT TGATTCTGG AGCCTCGAG                                     349

```

(2) INFORMATION FOR SEQ ID NO:1219:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1219:

```

GAATTCTAGA CCTGCCTCTC CTGTCACTTC CTTGTGTTT CTCTGTGACC GGCCTCTGTT      60
CCCACCACCC TTTTGGAAT GCTGCCTGA TGGTCACCAG TGCTTTCCTA ATAGCCAAAT      120
TCAGTGGCCT GTCCTCAAGC TCCCCCGAAT TCTTTGGCCA CACAGATCAA CCTCTAAGTC      180
CTGGGAATC CCTCCTTTGT GATTTTGAGG CGCTGTGTGC TGCAGGCTCT GCTTTTCCT      240
CCCATCACCC CATGGTTCTT CTTTCTCTC TGACCCCTCC CTCTTCCATT TCTCCACAG      300
CTCTGTCCAC AGCCACAATG TCCATAGGAG CTTGCCACAC CCTTTATCCA ACTGCAGCCT      360
CAACCCACCT GCAAAGGACC CCTGAACTCG AG                                     392

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(2) INFORMATION FOR SEQ ID NO:1220:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 598 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1220:

```

GCAAGCTACT TCTTCAACAG CTGTATCTGC TTCAAAGCCG ACTGCCTCTC CTTCAGCAT      60
TGCAGCAAAC AATTGTACTG TGAATACGTC ATCAATTGCA ACGTCTTCAA TGAAGGGTCT      120
TACGACTACA GGAACTCGT CTCTTAATAG CACATCTAAC ACTAAAGTAT CAGCAGTGCC      180
TACAAATATG GCTGCCAAGA AAAACATCTA CCCCCAAAAT AAATTTTGTT GGTGGTAATA      240
AGCTGCAGTC NACAGGAAAT AAAGCAGGAG ACCTTAAAG GGACCCGAAT GTGTTAAAG      300
TAATCCTGTC ATTTCTGCTG TGCAGATTCC TGAAGTAAAG CAAGACACAG TGTCAGAAC      360
AGTCACACCT GCATCTCTTG CTGCTTTACA GAGTGATGTG CAGCCAGTGG GCCATGATTA      420
TGTGGAAGAG GTACGAAATG ATGAAGGAAA AGTAATTCGG TTCCATTGTA AATTATGCCA      480
GTGCAGCTTT AATGATCCCA ATGCTAAGGA GATGCACTTA AAAGGGCGAA GACACAGACT      540
TCAATATAAA AAAAAAGTAA ATCCAGATTT GCAAGTAGAA GTAAAGCCAA TACTCGAG      598

```

(2) INFORMATION FOR SEQ ID NO:1221:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 338 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1221:

```

GAATTCGGCC TTCATGGCCT AGAGGAGTCC TGTCAGTTCG TTCTCTGCTG TGTCCCAAG      60
ACCATGAATC ATGGCTGGCA TGTAGTAGGC ATTTAATAAT ATATGTTCAA CAAGTATTG      120
GCAGTCTTGG AGGGCAGAAA AGGAGGTGGG GAAGATTTT AAATAACATT TTTTAAAAAG      180
TCACATTGTC CTACAATACC GATTTTCTT GCATATTTAG GAAATTGAGG GTTTTCTTCT      240
AAAACATGCG GACATATGGG AAATAGGATG CAACATTGTC ACTAATGTTT CAGACACAGT      300
TAGAGGTTTC CAAGAGATTT TGCCTGGGT CACTCGAG      338

```

(2) INFORMATION FOR SEQ ID NO:1222:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1222:

```

GCTCGAGTGA CATGGAACT GAGGTCTTAG AGACACGTGT AATGGAGAGG AGAGGAATGG      60
AGACCTGTGC GATGGAAACC AGAGGGATGG AAGCAAGGGG CATGGATGCA AGAGGATTGG      120
AGATGAGGGG CCTGTCCCC AGTTCAAGAG GCCCTATGAC TGGTGAATT CAGGGTCTCTG      180
GTCCCATTA TATAGGGGCA GGTGGCCCTC CTCAGGGACC CAGACAGGTC CCAGGCATTG      240
CAGGGGTGGG GAATCCTGGA GCTGTATGC AGGGTACAGG CATACAAGGA ACAGGCATGC      300

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AGGGAGCAGG CATAACAAGG GGA AAAATGC TCGAG

335

(2) INFORMATION FOR SEQ ID NO:1223:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 534 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1223:

GAATTCGGCC	TTCATGGCCT	AGGTACAGAC	TGAACCCAGG	AACCCGGGTA	TCTGCGTCTCT	60
GAGTCCCAGC	GCCCACCAGG	ACTGGGGCCT	CCTCACATCT	ACTCTGAGGA	CAGAATCTAT	120
TGGCAGAGTC	TTCTTTTGTG	TTTGGGATGC	TGGGTTTGAG	AACATGCCGG	GAACCAAGAG	180
TCGTGACTAA	TCCAATTTTG	AGCGCTTGAG	GACCAAGTGG	AAAGAACTC	AAGCAGATT	240
AAAGTGACCA	ATGCTGGTT	ATGCCCTTGA	GCCCCTGCAG	AAGCAACAA	TAATTTTGTG	300
TGTGTGTGGA	CAAATACATT	TGTATTCCAG	ATCTCACAGA	ATTTCCTACA	CAAAGAAATT	360
TGCAAGGAAA	ATGGACATTG	CACCCTAAAA	ATTAACAAGG	AAAGAAGGTA	CCAGGAGCAA	420
CAACTCATT	ACAGGAACAG	AAACAATATT	GCAAATATT	CAGATGCAA	GTGTATCCGA	480
CTTATAATAC	AACTGTCCCT	ACTGTGTCTA	AAGAAATGAA	AGGCAATCCT	CGAG	534

(2) INFORMATION FOR SEQ ID NO:1224:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 354 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1224:

TCACGAATGG	CCCACAGGGA	TCAGGAATGG	TATGATGCTG	AAATTGCCAG	AAAAGTCAA	60
GAAGAAGAAC	TTTTGGCTAC	CCAGGTGGAC	ATGAGAGCCG	CTCAAGTAGC	TCAAGATGAA	120
GAAATCGCTC	GACTTCTAAT	GGCTGAAGAA	AAGAAAGCTT	ACAAAAAGC	CAAGGAGCGG	180
GAGAAATCAT	CTTTGGACAA	AAGAAAGCAA	GACCCCGAGT	GGAAGCCAAA	AACAGCTAAA	240
GCAGCAAATT	CCAAGTCAA	AGAGAGTGAT	GAACCTCACC	ATTCTAAGAA	TGAAAGGCCA	300
GCACGGCCAC	CACCACCTAT	CATGACAGAT	GGTGAAGATG	CGGATTCTCT	CGAG	354

(2) INFORMATION FOR SEQ ID NO:1225:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 488 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1225:

GCAACAAAAC	AAAACAAAAC	ACACTTATGG	TAACCCATTC	TGTTGAGGAG	TCCAAAATC	60
GAATAAAGCG	CCTCATTGCC	TTTAAGTGGT	TCTGTGGCAG	TGAGATCATC	ATCCCTATGC	120
TGGCTCACCT	AGTGTCTCTC	TCTCTCTCCC	GTTTCTCTC	TCCCTCTCTT	ATCCCCCTGA	180
CTCTCCCCAC	TTCTCATCTT	CTCTTAGAT	TATGTGGTAG	CTATCCTCAA	GAGCTCATAG	240

TGCTGCTGCTG GATCACTGAC AAAGAAGTGG AAAGTGTATC AAGTTTCAGG TCCTGGAAGC	300
GCATCCCTGC CGTCATCTAC AGGCACCAGA GCAATGGAGC TGTCAATGCC CGCTGTGGAC	360
AGCCAGAGGT TAGCTGGTGG GGCTGGCGAA ATGCAGATGA TGAGCATCTG GTACAGTCAG	420
TAGCCAAAGC TTGTGCCTCT GACTCCCGAT CGAGTGGCAG CAAGCTGTCA ACTAGGAAAC	480
GACTCGAG	488

(2) INFORMATION FOR SEQ ID NO:1226:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1226:

GATCCCCACC AAAACAGGAA AAGAAGTGCT CTCGTGCAGG GCTTGTTTAC AGTGAGCCTG	60
GCTGGCTCCT CATGATCTCT GAGTTTAAAA TGTGCCAGCA GATGATTTTA ACGATCCCAT	120
CAAAAATTGT TGTCTGGATC AGTTTCGAGC TAGCGTTTCC TTGCAGAGGC CATTCTTCCT	180
TTTTTGACAA AAGTTGGGTC GGCCAGGTGC AGTGGCTCAT ACTTGTGATC CACCTGCCTT	240
GGCCTCCCAA AGTGCGGGGA TTCTAGGCAT GAGCCACCAC ACCCTGCCAG AAAATGGAT	300
TTAAAAAGAG AATTACAAAG TACTCGAG	328

(2) INFORMATION FOR SEQ ID NO:1227:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 527 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1227:

GAATTCGGCC TTCATGGCCT AAAATTTTAA AAAAATATTT ATAATGATAG TTAGAGAACT	60
GTTTATATGA GGATCAGACA TTGTTTCAGC ACTGGATCTC CTCGTGCCCC TCTCTTGCTA	120
CAGCATACAG CCCAGAGACA CACATGTAAA AGTAGATGAT CTCTGTAAAC TTCAGCTGCA	180
TTTCTGTATG TGTAGGATG TCCTANTATC AGATATCCTT TGAGAAAGAG TTGGAGAGGC	240
ATGGAAGGAA GCATATTCCT GACCTCCCCC CTTTTAGCT AAAGATACAA ATTACAGAGCT	300
GTTTGAAAAG GGCTTAGAAT AATATTAATT AAACATATTC TATAATACAA AGAGAAGTAC	360
TTTTTTAAAA TACATTTATT TTTCTTTCTT TTTTAGCAGG CATTCTGAC AGAAAATCTT	420
TAGGGCCAAT TAGAGTTTCT TTCTGACTTT TAATTGCCCT CTGCCTTTTG GGAAAGTGTT	480
GAAAAAGCT CTGGAAGAAA ATATGCTGGT CAAGGTCGCA ACTCGAG	527

(2) INFORMATION FOR SEQ ID NO:1228:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1228:

GAATTCGGCC TTCATGGCCT AAGAAAACAG CCTAGAATTA AACCTCCAAG ATGAGTGTGA	60
GATGAAGCCT TTCCACCTAT CCAACAAGG TTTAAAAAAA ATAAAACTA GAATGGGGCT	120
ACTACACAAC AGCCCTTTGC CCCACCCAAG GCTCATTCCC TAGAGGCAAG TGTACGAGTT	180
TATTTCTCCT TGAAATTATT TCCATATCTC CAAATAGTGT TTATACCACT CAAGGCAGAG	240
ATAGCAATTT GCCTACCCAG TATACATTTC CCCTCGAG	278

(2) INFORMATION FOR SEQ ID NO:1229:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 603 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1229:

GAATTCGGCC TTCATGGCCT AGCCACCTTG AAGCTCTCAA ATATCACTGT TGTGAATACA	60
GAGAGGGAAA ACCAACTGTA ACGTGCCACC CAAATTTTTT CAGATTAATA CATCATTCAT	120
CAGACTTCAT TCGTGATCTC GAAGAGTGAC ATCAGTCTTC CTGGAATAT GAAGAGAATT	180
TCTTTGGTTC TTCTTTTGCA TTTCTATTG ATTTATTTA TTTTATTTA TTTTATGTTT	240
TTTGGTACAG AAAGCTCATT ACTAGTCCTG TCCAGCAACG TGCTCTCCT GGCCTAGAG	300
TTCTTGAAA TAGCCAGGC CAAAGAGAAG GCCTTTCTCC CCATGGTCAG CCACAGTTC	360
CACATGCGCA CAGAGGAGTC TGATGCCTCA CAGGAGGGCG ATGACCTACC CAAGTCTCA	420
GCAAACACCA GCCATCCCAA GCAGGATGAC AGCCCCAAGT CCTCAGAAGA AACCATCCAG	480
CCCAAGGAGG GTGACATCCC CAAGGCCCCA GAAGAAACCA TCCAATCCAA GAAGGAGGAC	540
CTCCCCAAGT CCTCGGAAA AGCCATCCAG CCCAAAGAGA GTAACATCCC CAGAGCCCTC	600
GAG	603

(2) INFORMATION FOR SEQ ID NO:1230:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1230:

GAATTCGGCC TTCATGGCCT ACCGGGCAGT TAGGCCCAAG CGCCGGTTC AGGCCTCCAA	60
AAACCCCTG AAAATGCTGG CGGCAAGAGA AGATCTCCTT CAGGAATACA CTGAGCAGAG	120
ATTAAACGTT GCCTTCATGG AGTCAAAGCG GATGAAAGTA GAAAAGATGT CTTCCAACCTC	180
CAACTTCTCA GAAGTCACCC TGGCGGGTTT AGCCAGTAAA GAAAACCTCA GCAACGTGAG	240
CCTGCGGAGC GTCAACCTGA CGGAACAGAA CTCTAACAA AGCGCGGTGC CCTACAAGAG	300
GCTGATGCTG TTGCAGATTA AAGGAAGAAG ACATGTGCAG ACCAGGGTGG TGGAACTCG	360
AG	362

(2) INFORMATION FOR SEQ ID NO:1231:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 468 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1231:

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GAATTCGGCC TTCATGGCCT AGTCCCTGTT CAATTTCTCT CAGCCTCAAT ATCTTTTACT      60
TTAAACTAGG TAGGGTTACC AGTTCAATGA TCTGCTCAT AAATACTTAC TATACCTTAG      120
GTACTATATG AGAAGCTAGG AAAAGAGTGA TGAAAAAGAC ACACCTAGAG AGGGCATTGG      180
ATTATTAAT CAGCAGCTAC TGTAAAGGTA TTTAAGTTCT GTGACAGGCA GCATTCTGGG      240
TATCACAGGA ACATCTTACA AGAATTTCTA ACTTCAGGAG GAGGGTTCAG AGAATTAGCC      300
AGGCCAGGGG TGAGAGTGTT CTTCCTGGAA GAGGGAACAA TGAAGACCCA GGAGGAGATA      360
CAGAGTATCT CGCTGTATTT AAAATAACCA GAAATAGATT TATATATTTA GTACAGAGGC      420
TGAGGGGAAG AGAAGTGAGT GTGAGAAGAT CAAAAGGAGA AGCTCGAG      468

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(2) INFORMATION FOR SEQ ID NO:1232:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 400 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1232:

```

GAATTCGGCC TTCATGGCCT ACAATCATCT CAAACAGTTC CGGGTTGCTG CCCTTTTGGC      60
TTCCCTAGGT GCTACAGTAG CAGGCTGTTT TCCCCTTTTC CATAGAGGGG AATATTCTGC      120
ATCACCCCTT TGTTTGCCAT TTCCTACAGG TGAAACGCCA TCATTAGGAT TCACTGTAAC      180
GTTAGTGCTA TTAAACTCAC TAGCATTTTT ATTAATGGCC GTTATCTACA CTAAGCTATA      240
CTGCAACTTG GAAAAAGAGG ACCTCTCAGA AAACCTCACA TCTAGCATGA TTAAGCATGT      300
CGCTTGGCTA ATCTTCACCA ATTGCATCTT TTTCTGCCCT GTGGCGTTTT TTTTATTGGC      360
ACCATTGATC ACTGCAATCT CTATCAGCCC CCCACTCGAG      400

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(2) INFORMATION FOR SEQ ID NO:1233:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 418 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1233:

```

GAATTCGGCC TTCATGGCCT AGGATATAGA CCAAACCCAA ATCCTGTTGG ACAAGGGATT      60
AGACCACCTA TGGCTGGATG CAACAGTTTG GTAGGCGGCA TGAGTATGTC GCCAAACCAA      120
GGCTTACAGA TGCCGAGCAG CAGGGCCTAT GGCTTGGCAG ACCCTAGCAC CACAGGGCAG      180
ATGAGTGGAG CTAGGTATGG GGGTTCCAGT AACATAGCTT CATTGACCCC TGGGCCAGGC      240
ATGCAATCAC CATCTTCCTA CCAGAACAAC AACTATGGGC TCAACATGAG TAGCCCCCCA      300
CATGGGAGTC CTGGTCTTGC CCCAAACCAG CAGAATATCA TGATTTCTCC TCCTAATCGT      360
GGGAGTCCAA AGATAGCCTC ACATCAGTTT TCTCCTGTTG CAGGTGCGCA CTCTCGAG      418

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(2) INFORMATION FOR SEQ ID NO:1234:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1234:

GAATTCGGCC	TTCATGGCCT	ACGCCTCTTT	AACACATGGG	CCTTTGTGTG	GACACCATCT	60
TTCCCTGAAA	CCTGTCTGCA	TCTTTTCTGT	CCCTTCTAAC	CATCCAGTTT	GTTCCTCCCC	120
AAGATGGGCT	GCCACAAGTT	GCCATTTCCCT	GA CTGGTGCA	TGGTTCCAGA	CAGCTCGCGG	180
GCAGACACAG	GGAAGGAATC	TTATCTCGTT	TTTGTTTTTT	TGTTGTGTGT	TTTGTTTTTT	240
TCTTTTTTGT	TGTGTTGTT	GCTGTTGTTT	TGAAACGGAG	TCTCACTCTG	TTGCCAAGGC	300
TGGAGTGCAG	TGGCGCAATC	TCGAG				325

(2) INFORMATION FOR SEQ ID NO:1235:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 395 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1235:

GAATTCGGCC	TTTATGGCCT	AAAAAAAAAA	AAAGAAAGAA	AGAAAATGTT	GGATATAGTA	60
GGTCTGAGCT	TTATGGAGAA	AGAAGGTTTG	AAGTAGCTTC	TGGGATATGG	AAAAAGAACT	120
TATGAGAGAA	ACAGACTTCT	GGGAATCCTT	CAAGGACTAG	AAGAGAACAT	AGATTATGAA	180
AGAATGAGTC	ATTGATCAGT	GTAGTTGTAG	ATTAGAATAG	TTGGACAGTT	AGGATTGCT	240
AGGCAGAAGA	ATGGAGGAAG	TCACGGCCTA	GGGAGTTAAC	AGTGTTAGGA	GCAAGAGAGG	300
TTTTAACTAA	TGAGCCATGG	AGTTTAAGCA	GAGACAATAG	AGAATAAAGT	AAAATAGGAA	360
GAAAAATTTA	AAAAGAAAGT	AGAAAAGTCC	TCGAG			395

(2) INFORMATION FOR SEQ ID NO:1236:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 565 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1236:

GAATTCGGCC	TTCATGGCCT	ACACAATTCC	AAAGAAGGTG	GTGTGCCACT	TCAGTGGGAA	60
GGCCTATGCC	GACGAGGAGC	GGTGGGACCT	TGACAGCTGC	ACCCACTGCT	ACTGCCCTGCA	120
GGGCCAGACC	CTCTGCTCGA	CCGTCAAGCTG	CCCCCCTCTG	CCCTGTGTTG	AGCCCATCAA	180
CGTGAAGGA	AGTTGCTGCC	CAATGTGTCC	AGAAATGTAT	GTCCCAGAAC	CAACCAATAT	240
ACCCATTGAG	AAGACAAACC	ATCGAGGAGA	GGTTGACCTG	GAGGTTCCCC	TGTGGCCCCAC	300
GCCTAGTGAA	AATGATATCG	TCCATCTCCC	TAGAGATATG	GGTCACTCC	AGGTAGATTA	360
CAGAGATAAC	AGGCTGCACC	CAAGTGAAGA	TTCTTCACTG	GACTCCATTG	CCTCAGTTGT	420
GGTTCCTATA	ATTATATGCC	TCTCTATTAT	AATAGCATTG	CTATTTCATCA	ATCAGAAGAA	480
ACAGTGGATA	CCACTGCTTT	GCTGGTATCG	AACACCAACT	AAGCCTTCTT	CCTTAAATAA	540
TCAGCTAGTA	TCTGTGACGC	TCGAG				565

(2) INFORMATION FOR SEQ ID NO:1237:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 298 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1237:

GAATTCGGCC	TTCATGGCCT	ACACTGAGAA	CGAGATGGCT	ATTTATGAAT	TCATTCATAA	60
CTTTGTGGAA	GTTTGTAGATG	AGTATTTCAG	CCGAGTGAGT	GAATTAGATG	TATCCTTTTT	120
CAATACTGTT	TTCCACAGTA	CTTGGCAAAT	GCACTCTGGT	CCTTATCAGG	TAAGTACCAC	180
AAGGCAGGAA	AACATTTCAG	CAGAGTCCAG	AGTGTTCATC	ACCAACAAC	ATGACAAGAC	240
AGCCAGAGGT	GTGTGTGTTT	TGCAGAACTC	CTCCCCAACT	TCGTACCCA	AGCTCGAG	298

(2) INFORMATION FOR SEQ ID NO:1238:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 303 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1238:

CTCGAGTGGG	GGGAGGGAGG	GGGAGGAGAG	AAGGGGAGGT	GGATGGGGGA	GGGGGACAGT	60
GGAGGAAGAG	GGAAGAGGGA	GAAAATAAGG	AGAAAGAGAA	GGAAAGGCAG	AAGGGGAGGG	120
GAAGGGGGAA	GGGAAGAAC	AAGGGGAATG	GGAAGAGAAT	GAAGGGGAAG	AGAAGAGGAA	180
GAGTAGGAGG	AGAAATAACA	AAAGGCACCA	GTTTGGAAG	GAAGAATTTA	AAATATATTT	240
ATTTGCAAAC	GACATTATCC	TATAGTGAAA	AATCCTTAAA	AGTTAGGCCA	TGAAGCCGAA	300
TTC						303

(2) INFORMATION FOR SEQ ID NO:1239:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 315 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1239:

GAATTCGGCT	TCATGGCCTA	CTCTTCTCTG	AGACAGAAAA	CTAGCGAACC	CCAGGGGAAG	60
GTGCCGTGTG	GAGAGCACTT	TCGATTTCGG	CAGAACTTAC	CAGAGCACAC	CCAAGGCTGG	120
CTTGGGAGCA	AATGGCTCTG	GCTTCTTTTT	GTTGTGTGTC	CGTTTGTGAT	ACTGCAGTGT	180
CAAAGAGACA	GTGAGAAGAA	TAAGGAGCAG	AGTCCTCCTG	GCCTTCGAGG	CGGCCAAGTT	240
CACTCTCCAT	TAAAGAAAAA	AAGAAATGCT	TCCCCAACA	AAGACTGTGC	ATTCAATACC	300
TTAATGGAAC	TCGAG					315

(2) INFORMATION FOR SEQ ID NO:1240:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 553 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1240:

```

GAATTCGGCC TTCATGGCCT AAAATGACCT TGGTAAGAAT GGGTTTTTAC AATAAATGAA      60
TTTTTAATTC CAAGATGTTT TTTCATTGAA ATTACTGCCC CAGTTGCATT AAAAGTGTGG      120
CTGTGCAAAG CTTCCTTCTA CCAGGCTTCA TGTGCAGGAC CTGGGTTTTT GTTGCCTTGG      180
CAATTCCAAA AGCAGGTGTT GAAAGAGAAG AAGACAGGAA AAAGAAGATG GGAGAAAAAT      240
TTTCCAAATC AGAGTTCTCA GTCCAAGGAC TTATTCTTGG GGGTTCAAAA ATTCTAACAG      300
TATTTTTTAA TTGCCTCTAT TTCGATGGTT ACTTGATTAA ACTGTTCTAA CATTTCTAAA      360
AATAAAAATT TGCAATGATA ACTTTTATAT CAGACTTTAC CTCTGTTTCC CAAATGGGAA      420
TCTTTAGGAA TATTTTTTTG AGATCACTTT TTTCTTTTTT TTCTTTAACA AAGATTGGGA      480
ACCGCTCTTA GGAACAGACA AATGGATTTC CATATTCTT AAAGCGTTGA AGTAAATCTC      540
TGCCACCCTC GAG                                         553

```

(2) INFORMATION FOR SEQ ID NO:1241:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 437 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1241:

```

GAATTCGGCC TTCATGGCCT ACTCTTCTCA AGGCTTTGAA ATCTCCCTT GCACTGAGAT      60
TAGTCGTCAG ATCTCTCCCC GTCTCCCTCC CAACTTATAC GACCTGATT CCTTAGGACG      120
GAACCGCAGG CACCTGGGCC GGGCGTCTTA CTCCCGCTGC TTGTTCTGTC CCCTCCCTCG      180
GACCAAACAG TGCTCATGCT TCAGGACCTT GTTGTGCGAA GATGTTGGTT TCCCTTTCTC      240
TGTTATTTAT ATAAAAATAA TTTATCAAAA GGATATTTTA AAAAAGCTAG TCTGTCTTGA      300
AACTTGTTTA CCTTAAATTT ATCAGAATCT CAGTGTGTTGA AAGTACTGAA GCACAACAT      360
ATATCATCTC TGTACCATTG TGTACTAAAG CACTTGAGTC TAATAAATAA AGAAATCAGC      420
ACCCCTAGGC CATGAAG                                         437

```

(2) INFORMATION FOR SEQ ID NO:1242:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 523 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1242:

```

GAATTCGGCC TTCATGGCCT AAAAAATAT GTCTTTTGAA AACCNAGTCA AGTACCTAGA      60
GATGAAAACC ACAAATGAGA AACTGTTACA GGAATTAGAT ACACTTCAAC AACAATTGGA      120
TTCACAGAAC ATGAAAAAAG AGAGCCTGGA AGCAGAAATA GCTCACTCCC AGGTGAAACA      180
GGAGGCGGTA TTGCTGCATG AAAAAGCTTA TGAGTTGGAG TCCCATCGAG ATCAATGAT      240
TGCAGAAGAC AAAAGCATAG GATCTCCAAT GGAAGAGAGA GAGAAATTAC TTAAGCAGAT      300
TAAAGATGAT AATCAGGAAA TAGCCAGCAT GGAAAGACAG TTAACAGATA CAAAAGAAAA      360
GATAAATCAG TTTATTGAAG AAATTAGACA ACTTGACATG GATTTAGAGG AACACCAAGG      420
TGAAATGAAC CAGAAATACA AGGAGCTAAA GAAAAGGGAG GAACATATGG ACACTTTTAT      480
TGAGACTTTT GAGGAAACAA AGAATCAGGA ACCAAAATC GAG                                         523

```

(2) INFORMATION FOR SEQ ID NO:1243:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 352 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1243:

```
GAATTCGGCC TTCATGGCCT AACTGATTAC AGGGAAAGAC AAAAGCAAA AGGTGATTGA      60
AACATAGTTC TAAATAACAA GAAGGGAAGT TTTCTTAAAC TGATCATCTG TCTTATTGTC      120
ATGACAAAGG GTAAAATTTT ATTTTCAGTC CTTTAGTGCT TTTAATAAT TCACCATACA      180
TATTTTACTT ATATCCCATT AACTGTGGGA CTTAGCACAG TTTACATTTT CAGTCATGTG      240
AATATAATTA TCTGTATTCC CTGTTGGACT GATGGGGGAA ATTGGATCAT TATATAATTT      300
AAAAGACACC TCCCAGGCA CCCATTGTGT TCTTAGGAAG TCAGTGCTCG AG              352
```

(2) INFORMATION FOR SEQ ID NO:1244:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 306 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1244:

```
GAATTCGGCT TCATGGCCTA ATTCAGCTTT ATCGTTCCTT CTGGCAGTTC AGTTGTTGGC      60
CCAGATTTAT TAAGGTTCTG CAGAAAGCAA CTGAAATCTC CCTTAGAAAT AAAGTTCCTG      120
GTGTGAAGAA AAAAAAGATC CATAAAAAGT CTCATCCTTA GGACAGCAAC TTTTATAATG      180
CACAGCTGAT CTGAATAGCT CTCTGGATTG TGGCCTTGGA CAACAGTTCA GACTGCATTA      240
TTGAGTATGA ACCTTGAGCT TTCTGAGTCT CTTCTTTTGG CTCTTTTACT AGCAGACCCCT      300
CTCGAG                                306
```

(2) INFORMATION FOR SEQ ID NO:1245:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 591 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1245:

```
GAATTCGGCC TTCATGGCCT AGGGTTTGGG GGTTCGAGA TGTTACTCTC ACTGAAGTCT      60
GTGTGGGAGG CGGATTACTA AACAGAAAT TGCTAATTAA TCTCCAGATG GCAAGGAATG      120
GATAAGCAC TGTTCCCAAC AAGGTCCAAA TGCTCCGCTT GGAAGAGTGT ACAATGGATG      180
CAGTTGGTCT TCCTGCTGGC AACAGTACCA CCGAAGCGCT TGGGGCAAGT TCCAAATCCA      240
GTAACCTCTT TTTATAATCT TCTTTGGTAA ATTCCCTCCT GGGAAACATG GTTGCTAACG      300
AAAAATTACC GTAAGTGTG CCAACAGTCT GTGCAGCAAA CTGCCTTGCC TCTTCTAGAG      360
GAGCATCAGA AGGGAAGTGA TTTGTAAAGG AAGAACCATC AGGAAGACGG AATTGAATTC      420
TTGCAACAGT GCTTCTTTCT CTGTCATAAG ATTCCCTCTT GACTTCCATT TCTGCCTGTT      480
TTGCTAGCAA GGCAGCAGCT TTGGCAGCCT CTACTTCTTC CTTTGTCTTT GCAAAACGAG      540
CAGCTCTCTC TGCACGGTCC AATGCAATCT GCTGTTTAT ACGTTCTCGA G              591
```

(2) INFORMATION FOR SEQ ID NO:1246:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 593 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1246:

```

GAATTCGGCC TTCATGGCCT ACTTCGGGGA AGAAACCTTC ACCAGAGTGG AGCAGTTCAG      60
ACCATGGAAC CTCGTATCCA AGCAGCCCAG CTCCTGCAAT TAAAGAAGAA AACCCAGGAG      120
GACGCAGAGG CTATCTGCTC CCTGTGTACC TCCCTCAGCA CCCAGCAGAT TGTCAAATTT      180
TTAAACCTTT ATACTCCCCT GAATGAATTT GAAGAACGGG TAACAGTGGC CTTTATACGA      240
ACAATCCAGG CACAACCTACA AGAGCGGAAT GACCCCTCAGC AACTGTCTAT AGATGCCAAG      300
CACATGTTTC CTGTTTGTGT TCCATTAAAT CCATCTTCTC TAACCATGGA CTCAATCCAC      360
ATCCCAGCGT GTCTCAATCT GGAATTCCTC AATGAAGTCT GAAGATGCAT GTTCCAGCA      420
TTAGTTTGAT TCCCAATGTG AGCAAGAAGG AAGTATATAC AGTAAAGTAA ATTCAAGGAT      480
CTGTTAAATC TGGTAAAGT AGATCAAATC AGAGATTGAC AGCCTGTGGA GGGTGCTGAA      540
CTATACAGAA TTAGACACAA CTATGTCATT ATTTTGTGTA CCAACTACTC GAG              593

```

(2) INFORMATION FOR SEQ ID NO:1247:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 599 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1247:

```

GAATTCGGCC AAAGAGGCCT AACTCAGAA TGGTGCTACT TGAAGACTCT GGATCTGCTG      60
ACTTCAGAAG ACATTTTGTG AACCTGAGTC CCTTCACCAT TACTGTGGTC TTAATTCTCA      120
GTGCCTGTTT TGTCAACAGT TCTCTTGAG GAACAGACAA GGAGCTGAGG CTAGTGGATG      180
GTGAAAACAA GTGTAGCGGG AGAGTGGAAG TGAAAGTCCA NGAGGAGTGG GGAACGGTGT      240
GTAATAATGG CTGGAGCATG GAAGCGGTCT CTGTGATTG TAACCAGCTG GGATGTCCAA      300
CTGCTATCAA AGCCCCTGGA TGGGCTAATT CCAAGTGCAGG TTCTGGACGC ATTTGGATGG      360
ATCATGTTTC TTGTCGTGGG AATGAGTCAG CTCTTTGGGA TTGCAACATG GATGGATGGG      420
GAAAGCATTG TTGCAATCAC AATGAAGATG CTGGCGTGAC ATGTTCTGAT GGATCAGATC      480
TGGAGCTAAG ACTTAGAGGT GGAGGCAGCC GCTGTGCTGG GACAGTTGAG GTGGAGATTC      540
AGAGACTGTT AGGGAAGGTG TGTGACAGAG GCTGGGGACT GAAAGAAGCT GAACCTGAG      599

```

(2) INFORMATION FOR SEQ ID NO:1248:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 418 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1248:

```

GAATTCGGCC AAAGAGGCCT AACCGAATGG ATTATCTGTG GGAGTAACAT CTCAGAAGAC      60

```

TATGAAGCTA	ATTCCTGCCT	CAAGACACAG	AGCTACACAA	AAGGTGGTTA	TTGGAGATCA	120
TGATGGGGTA	GTTATGTGCT	TTGGCATGAA	GAAAGGAGAA	GCAGCAGCAG	TGTTCAAGAC	180
TTTACCCGGG	CCGAAGATTG	CAAGGCTGGA	ACTGGGAGGG	GTTATCAACA	CACCTCAGGA	240
GAAAATTTT	ATTGCTGCAG	CATCTGAGAT	TAGAGGCTTC	ACAAAAAGAG	GAAAACAGTT	300
CCTCTCCTTT	GAAACAAACC	TCAC TGAAAG	CATTAAAGCT	ATGTATGTCT	TTTGTTCTCT	360
TTTGTATTTT	TACATACTTA	TTTATAATAT	TTTGGATAGA	TGTGAGGCAA	CCCTCGAG	418

(2) INFORMATION FOR SEQ ID NO:1249:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 800 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1249:

GAATTCGGCC	AAAGAGGCCT	AGCAGAGCAC	AGCATCGTCG	GGACCAGACT	CGTCTCAGGC	60
CAGTTGCAGC	CTTCTCAGCC	AAACGCCGAC	CAAGGAAAAC	TCACTACCAT	GAGAATTGCA	120
GTGATTTGCG	TTTGCCCTCT	AGGCATCACC	TGTGCCATAC	CAGTTAAACA	GGCTGATTCT	180
GGAAGTTCTG	AGGAAAAGCA	GCTTTACAAC	AAATACCCAG	ATGCTGTGGC	CACATGGCTA	240
AACCTGACC	CTTCTCAGAA	GCAGAATCTC	CTAGCCCCAC	AGACCCTTCC	AAGTAAGTCC	300
AACGAAAGCC	ATGACCACAT	GGATGATATG	GATGATGAAG	ATGATGATGA	CCATGTGGAC	360
AGCCAGGACT	CCATTGACTC	GAACGACTCT	GATGATGTAG	ATGACACTGA	TGATCTCACC	420
AGTCTGATGA	GTCTCACCAT	TCTGATGAAT	CTGATGAACT	GGTCACTGAT	TTTCCCACGG	480
ACCTGCCAGC	AACCGAAGTT	TTCACCTCCAG	TTGTCCCCAC	AGTAGACACA	TATGATGGCC	540
GAGGTGATAG	TGTGGTTTAT	GGACTGAGGT	CAAAATCTAA	GAAGTTTCGC	AGACCTGACA	600
TCCAGTACCC	TGATGCTACA	GACGAGGACA	TCACCTCACA	CATGGAAAGC	GAGGAGTTGA	660
ATGGTGATA	CAAGGCCATC	CCCGTTGCC	AGGACCTGAA	CGGSCCTTCT	GATTGGGACA	720
GCCGTGGGAA	GGACAGTTAT	GAAACGAGTC	AGCTGGATGA	CCAGAGTGCT	GAAACCCACA	780
GCCACAAGCA	GTACCTCGAG					800

(2) INFORMATION FOR SEQ ID NO:1250:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1250:

CAATTGCCAA	GGAAACAGGC	CTTGGCCTGA	AGGTACTAGG	AGGAATTAAC	CGGAATGAAG	60
GCCCATTTGT	ATATATTCAG	GAAATTATTC	CTGGAGGAGA	CTGTTATAAG	GATGGTCGTT	120
TGAAGCCAGG	AGATCAACTT	GTCTCAGTCA	ACAAGGAATC	TATGATTGGT	GTATCATTTG	180
AAGAAGCAAA	AAGCATAATT	ACCGGAGCCA	AGTTGAGTAC	TAGGTTAGAA	TCTGCTTGGG	240
AGATAGCATT	CATAAGACAA	AAATCCGACA	ACATTCAGCC	AGAAAATCTG	TCATGTACAT	300
CAC TTATAGA	AGCTTCAGGA	GAATATGGAC	CTCAAGCCTC	CCTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1251:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1251:

```

GAATTCGGCC TTCATGGCCT ACAGCCCTCT TACTAGGCCA GCACGCTTTC GCTTTTGCAT      60
TTACAATCAC ATACCCCATC CCCTCCACTT GAAAAAGAAT TTGTTTGTG TCGTTATCCA      120
AAAATCTCAT CTAAATCAA CCGTCTCGTC TCCCTGTAGC TTCATTACCA TCTCAGAAGC      180
AGCAAAGGAG CCAGCAAAAG CTAAGGTACA GAAAGTCGCT TTGGAGGATG ATGGTGAGTG      240
GTTATACTTA ATAGAAGCTA TCATTATTA AGCACCTAAT GTGTGTCTGG AGGGGCTCGA      300
G                                                                                   301

```

(2) INFORMATION FOR SEQ ID NO:1252:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 392 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1252:

```

GAATTCGGCC TTCATGGCCT TGCATGCCCA CAGTGAGCTG AGATCGCAGC ACTGTACTCC      60
ATCCTGGGGG ACAGAGCTAG ACTCCATCTC AAAAACGAAA GTGCCTGGTC GTCTTTCCAC      120
ACGACTCCGT TTCCACTCCC ATAAAATGCT ACGTTAGCTG TTTTGAGGGT AGATGCCCTT      180
AGACTGCCAA CTCACAAAGT TTTATTGGGC ACCTGTTACC TGTTTCAGCAG AGATTGTGTA      240
AAAAAGACAC ATCAGGTGGC CTTTGCTTGC AAGAAATCAG CCTTTGGAAC CTGTGGAGAA      300
AAGTTAAATA CTGCGTACTG TGCAAAATGA GGGTGGGAGC TATTGAAGGG AAGAGATTCA      360
CCCTGAAAAC CCAAGAATGG CCAATCTCG AG                                                                                   392

```

(2) INFORMATION FOR SEQ ID NO:1253:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 610 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1253:

```

GATTTCGGCCT TCATGGCCTA GCTGGTCTCT GGTTCAGGA TCGAATCGCC CCCAGCAGTA      60
TGTGTATATG CATCAGATAA GGTGAGGGAC AACCTTCCTC ACCCCCATAC CTGGCCAGCC      120
TGTAATGGGG AGGAGGCCCT TCTGTGGTGT GGTGGGGCTG GAGATTGGGC AGGGACAGAG      180
ACATACCTTC TCTGGGAATC TGAGAGAGAT ACCTTGAATC TAGGGGAAAG GGATTAGGTT      240
TTGAAAATGT TAGCCATTTT GTAAAGAGAA GTCCCTCACC ATTTCCCTTC CCATTAGTCC      300
TGGGAAATAG ATTGGGTAGA GGCTCAGAGC CTGGCCCCTG CTGCACTCCC AGCTTGGAGC      360
TACTGGGTTG TTGACAATGT TTTGGGGTTT CCAGGCCTTA GCAAGAGAAA GCCTCCCCAG      420
ATACCAGTCT AGGGGTAGAT GAAGGGGGCA GGAGCCCTGA AGGAAGGATT TGGGGCCGGC      480
CATTCAATCA TTCAGAAACA CTTATCATCC CTTATCAGAA GCCCTGACCT ATTGAGAGTC      540
AGGCACGTGC TATTGAGAGT CAGGCACGTG CTCATATAAA GATGAGTTTA ACATGGATCT      600
CCCTCTCGAG                                                                                   610

```

(2) INFORMATION FOR SEQ ID NO:1254:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 328 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1254:

```
GAATTCGGCC TTCATGGCCT AGAGGATTTA CACATGGCAT TCAGTGTCT GTATAGATCT    60
GCCTACCTTT GTGAATTCAT CTGTTAACCC CTCTTCCTTT GAGAGAGCAC CGCGCATGGT    120
GGTAACTCC TGTGTTTCT CTCTCTCTA CTGGTTATTC TTGAATTAAG CACAGACTCG    180
TCAGCTCGGT TGCTTTATCA TGAATAATGT GTGTGACCTT GCAGTTCTTC CACAGTTCAG    240
CAACAAGTG CTAGCTTCAC TGACCAAAA TTAAGGAAGG AAAACACAGT TTTAAACG    300
ATCCATCTTT TAACAGCCGA AACTCGAG    328
```

(2) INFORMATION FOR SEQ ID NO:1255:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 488 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1255:

```
GAATTCGGCC TTCATGGCCT ACTAAGAGAA CAATTAGAAT ATTGGAAGAT AAAGGGACAA    60
GTACTGAATT AGTTAAAGAA AATCAGAAAC TTAAGCAGCA TTTGGAAGAG GAAAAGCAGA    120
AAAAACACAG CTGTCTTAGT CAAAGGGAGA CTCTGTTGAC AGAAGCAAAG ATGCTAAAGA    180
GAGAACTGGA GAGAGAACGA CTAGTAACCTA CGGCTTTAAG GGGGGAACCT CAGCAGTTAA    240
GTGGTAGTCA GTTACATGGC AAGTCAGATT CTCCTAATGT ATATACTGAA AAAAAGGAAA    300
TAGCAATCTT ACGGGAAAGA CTCACTGAGC TGGAAACGGAA GCTAACCTTC GAACAGCAGC    360
GTTCTGATTT GTGGGAAAGA TTGTATGTTG AGGCAAAAGA TCAAAATGGA AAACAAGGAA    420
CAGATGGAAA AAAGAAAGGG GGCAGAGGAA GCCACAGGGC TAAAAATAAG TCAAAGGAAA    480
CACTCGAG    488
```

(2) INFORMATION FOR SEQ ID NO:1256:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 316 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1256:

```
GAATTCGGCC TTCATGGCCT AGATCCAGAC ACGGCACTGC AGCTTTCAGC TGACTAGCTG    60
TGTGACTTGG GCAAGCCCTT TAATCTCTCT GATCTCGGC TCCCTCTCT GTAAAATGGA    120
ATTAAGAATA ACCTCATTGA GGAGCTTCCT GAGGAGGTAA GGAAAGTGCC TGGCACAGTG    180
CCAGGCTGCT AAGAGATCAA TAAATGTCCC ATCCCCCAGC CCCACCCAG TTCTTTCAG    240
GAATTGAGA GACTCCTCCC CCTGTGTTTG AAAGTGGCAA AGTCTGGCAC ACTTGCCTCA    300
TAACACATAA CTCGAG    316
```

(2) INFORMATION FOR SEQ ID NO:1257:

- (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1257:

```
GAATTCGGCC TTCATGCCTA AGCTTCCTTC AGCAGCGCAG GCGGTGGTCC CTGAGGCCCG      60
TGGAAGGAGT CAAACTTGCG GGAATTTTGC AGTTTATCTG CAGGGCTGTT GTTCCAGCA      120
AGACCCAAAG CTAGAAAAGG AGGAGGAAGA AACTGACCCG ATCAGTGCCA GAAGTCATTG      180
TATTCAAAGA AGAATAAGCA AGAAAGAAA GAAGGAAGGA AGAGAGGTAG ACAGATACAA      240
GATGAAATCC TGTCAAAAAA TGGAAGGAAA ACCAGAAAAT GAGAGTGAAC CAAAGCATGA      300
GGAAGAGCCA AAGCCTGAGG AAAAGCCAGA AGAGGAGGAG CTCGAG      346
```

(2) INFORMATION FOR SEQ ID NO:1258:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 346 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1258:

```
GAATTCGGCC TTCATGGCCT ACGGCACTTC AAAAATATAA ATCAAAGTCC ATGACTCTAA      60
AAATAACATA TGCATTGATA TGCTCGCCCC TTTGACCCTT CTCTCAAGAG AAATTCCTTG      120
CCAAGTAATC CACATACATA AGAAGTGTA AAAGTCCCTA GATTAAGA GCATAAACT      180
TCATTATGGA AACACAGTAG TCCCGGTAT TTGGGAGCT GAGACAGGAG GATCACGAGT      240
CCAGGAGTTT GAGGTACAG TGAGCTATGA TCGCGCCATT GCACTCCAGC CTGGATGACA      300
GAGGAAATAT TAATTTAGA GTAATCAGAG AAAGCCAGGT CTCGAG      346
```

(2) INFORMATION FOR SEQ ID NO:1259:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 341 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1259:

```
GAATTCGGCC TTCATGGCCT ACCCCATTCA TGCAGGAATA AATCAAGTGA GCAGTTCAG      60
ACTTTTGCAT AATATTTTTA CTATGATGCT GTTTTATTA TATTTCTAA ATTTCAAAAC      120
AAAAAGTGAA TGTTTGAAAT TGCTGGGTCC CGATGTTGGT GGCTGTTGGA GTTTTGACC      180
ACTCGTAGC AGTGATTGA AGATTATAAT TAGCTAAAT CCAAAACAAA AAACCAACAA      240
CAAAAATTGT ATGGTGCAGA ACATGCACCT TGACAATGGT ACTAATTGT TATCTATAG      300
AACAGTTAG AATAGATCTA TTTTGCCAG AGCTTCTCGA G      341
```

(2) INFORMATION FOR SEQ ID NO:1260:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1260:

```
GAATTCGGCC TTCATGGCCT AAAGATAAGG TGGCTGTAAA TGCCTGGATT TATACCTGAG      60
TTCTCTCATC TGTTTCACTG ATCCATGTGT CTGTTTTTAT GCCAGTACCA TGCTGTTTGT      120
ATNACTATAG CTTTGTAAATA AATTTTGAAG TCAGGTAGTG TGATNCCTCC AGCTTCATTC      180
TTTTTGCTCA GGATNGCTTT GGNTATTCAT AGTCTTGTGG TTCCATGTAA ATTTTAGGTT      240
TTTTTTTTTT TTTTTTTTTT TTTTACTAT TTCTGTGAAG AATGTTATTG GTATTTTGAT      300
AAGGATGTA TTGAATCTGT AAATTGCTTT GGGTAGTCTT GTCATTAAA AATATTGTTA      360
TAGTTCTTCT AATCCATGAA CATAGAATAC CTTCCATT TTTTGGTGTC CTCGAG      416
```

(2) INFORMATION FOR SEQ ID NO:1261:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 86 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1261:

```
GAATTCGGCC AAAGAGGCCT AGGCAGACAT CCATAAACAT TTTCAAATG CAGGGTATGT      60
TTTTCAGTGT TAAGGCAACT GTTCTG      86
```

(2) INFORMATION FOR SEQ ID NO:1262:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 332 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1262:

```
GAATTCGGCC AAAGAGGCCT ACTTTTGGTA ATAACATTTT AAAGCAGGAA GTATCTACGG      60
TGTGATCGTG GTACAGTCTT TAGTTCAAGT GTGAAGACAT TTGGTTGTCT TGTATATGAC      120
CTAGAAGAAG GGGCGTCTGC TGGAAAACAA TGCTGTTCTT TTTCTCTTG TTTTGTGGGA      180
CGGGGTCTTA CTCTGTTGCC CAGGCTGCAG TGCACTGCCT CAATTTTCA GTTCAGTGCA      240
GCCTCGACCT CTGGGGCTTA AGCGATCCTC CTGCCTCGGC CTCCCAGTG ACTGAGACCG      300
CAGGCACACA CCACCACACC CGGCACCTCG AG      332
```

(2) INFORMATION FOR SEQ ID NO:1263:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1263:

GAATTCGGCC	AAAGAGGCCT	AAGCCAGGGT	AGGGACAGCA	GAATGAGTGAC	60
AGTTCTATGC	AAATGGAGTT	ATTATTATTA	TGTTATTAT	TAATAAGGGC	120
CAGAACTGCC	CAGTATGGCC	TGTGACTTCT	GCGCAGCAAT	TATTTCTCCA	180
CTGAAGCTAC	CTCACAGTGA	TGCAAAAAA	TGGGATTCCC	CACTAACCCC	240
CCCTTCCTAC	CAAACACAC	ATCTCTCAGT	CCTCTCGAG		279

(2) INFORMATION FOR SEQ ID NO:1264:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 629 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1264:

GAATTCGGCC	AAAGAGGCCT	AGGATCACGG	AGGTGGTGCC	TGTGTGTCCC	ACAGGAAGCA	60
AAAGCTGATG	CCCAGTTCCC	AGCATACCTA	AGTAAACTTC	AGGTCCACTC	CCAGCACGTT	120
TCTCGTGATA	GTAAACTAT	GAAGGAATC	AGTGACAAG	GAGCTTCTAC	AAAATAGGCA	180
GAAGACAGTA	GCCAGATGGG	CCAAGGGCCC	CAGCCACCCA	CGCCCTCCC	TCTCCTTGAA	240
GACCTTCGGT	TCCAACCCA	CCATCAGCAG	GGCTCTGCTC	AGTTCTCTCT	TATGTGTATC	300
ACCACAGGGC	TGCTGGCTCG	TGTCACGTTT	ACCACCAGAC	CCCACATCAG	GAGTCCCGCC	360
AGGGGTGTGG	GGAGGCAGCG	CTGCCTGGTT	GGCCGTGGAG	CCGTATGGAA	CATGGTGCCT	420
CACAGGCAGT	CTGCTTGGCG	TCCTGGATCC	TGGCTGTATC	CCGCTGGAAA	GGATGTGTGT	480
GGGTCTAAGA	TATGTATATA	ATAGAAACAT	TTATTCAGAA	GCTTTAGTCA	AGACTTCATT	540
TTTAAGTTCA	GAGTAATAAA	CTCATAGTCT	AAATTCCTTA	ATTTTCTGTT	TTAATTTACA	600
TAAATAAAAT	GAAATGCAAT	TTCCTCGAG				629

(2) INFORMATION FOR SEQ ID NO:1265:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 426 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1265:

GAATTCGGCC	AAAGAGGCCT	AGAGGTGCCC	ATTTCATATA	ATTTTAGCAC	ACTGGATGAT	60
AAAGGAGAAA	TGCTTTGGTT	TAAGAGAGGG	AAATCTTTGT	TACCAATACT	ATCGGTGAGT	120
TCACCTAATA	CTTCCTCGTC	ATCAAGTTCA	TTGGAGTACG	CATCTTCTTC	ATCCTCATCT	180
CCCGGTTTCA	TGGGTTCACT	TTTGACAGGG	CACTCCCGT	TGGGGTGTAA	AACGTTGCTT	240
TCTTTTGGCC	TTTCACAGTT	GTTCTCTTGG	TCTTTGCTCT	CTGACATCTT	GCTAGACTCA	300
GACGATGAGT	GGCTGAGGGA	GACAGAGGTA	ATTGGGGTGT	TCACTACTAA	ACTAGACAGC	360
CCCCCAGAT	TCACTTCAGC	CTTTGGCATT	TGGGTAATCC	CCAGCGGCTG	CTCTGCTGAG	420
CTCGAG						426

(2) INFORMATION FOR SEQ ID NO:1266:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 450 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1266:

GAATTCGGCC	AAAGAGGCCT	ACCGCCCATC	GCGCCGGCGC	GACCCGCAGG	AGCGTAGAGA	60
GCGCGGGACT	AGAGTGCAGA	GCTCCGGGAC	GTGGATCGGA	GCCGGCGCGA	TGGGCGGAGA	120
GCAGGAGGAG	GAGCGGTTCT	ACGGCATGTT	GCTGGCCATG	GCTCAGCAGC	ACGAGGGCGG	180
CGTGACAGGAG	CTTGTGAACA	CCTTCTTCAG	CTTCCTTCGA	CGCAAAACAG	ACTTTTTCAT	240
TGGAGGAGAA	GAAGGGATGG	CAGAGAAGCT	TATCACACAG	ACTTTCAGCC	ACCACAATCA	300
GCTGGCACAG	AAGACCCGGC	GGGAGAAGAG	AGCCCGGCAG	GAGGCCGAGC	GGCGGGAGAA	360
GGCGGAGCGG	GCGGCCAGAC	TGGCCAAGGA	AGCCAAGTCA	GAGACCTCAG	GGCCCCAGAT	420
CAAGGAGCTA	ACTGATGGAG	AAGACTCGAG				450

(2) INFORMATION FOR SEQ ID NO:1267:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 459 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1267:

GAATTCGGCC	AAAGAGGCCT	AGCTACTAAG	GCAGGTGCAG	CATCAATGAT	TCCTACATG	60
GTTCTGATAT	CAGCTCGCTT	GGTACTACTC	ACTTTGTGTG	GATGGGTACT	TTGTTGGACC	120
CTCGTCAATC	TCTTTCGAAG	CCATTGAGTC	CTCAATCTCC	TTTTCTTGG	CTACCCGTTT	180
GGTGTATTATG	TTCCTCTTGG	CTGTTTTTCA	CAAGATAGTA	GAGCACATCT	TCTTCTCACA	240
GACTACAACT	ATGTGGTTCA	GCACGAGGCA	GTAAGGAGAA	GTGCCTCGAC	TGTGGGAGGC	300
TTGGCCAAAT	CCAAAGACTT	TCTCTCCTTG	TTGCTGGAGT	CGCTAAAGAA	ACAGTTTAAAT	360
AATGCCACAC	CCATCCCCAC	CCACAGTTGT	CCCCTATCTC	CAGACCTCAT	TCGCAATGAA	420
GTAGAATGTC	TGAAAGCAGA	TTTCAACCAC	CAACTCGAG			459

(2) INFORMATION FOR SEQ ID NO:1268:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 432 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1268:

GAATTCGGCC	AAAGAGGCCT	AGAGTTTTC	TAAGCCCGGC	TGGTGTTTAA	AACGTGTTTT	60
GGCTTTGTTC	ATTTTATGGT	GTTGGTGTG	GTATTGGTGG	TCATGTACTG	GCATGTAAGA	120
TTTCTTTTCT	CTTTCCCTCT	TCTCTCTGCT	TCTACATTCT	GTTCAATTGAG	GCTTCCAAC	180
GAATATGAGA	GGAACGGGAG	ATATGAGGCG	TCAAGTCGCA	ATGTATCTGC	TGAGCAAAAA	240
GATGAAAACA	AAGAAGCAAA	GCCTCGATCC	CTACGCTTCA	CCTGGAGCAT	GAAAACCACT	300
AGTTCAATGG	ATCCCGGGGA	CATGATGCGG	GAAATCCGCA	AAGTGTGGGA	CGCCAATAAC	360
TGCGACTATG	AGCAGAGGGA	GCGCTTCTTG	CTCTTCTGCG	TCCACGGAGA	TGGGCACGCT	420
GGTAACCTCG	AG					432

(2) INFORMATION FOR SEQ ID NO:1269:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 510 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1269:

```

GAATTCGGCC AAAGAGGCCT ACCCTGAAC TCTCCAGTGT GCACCTGCAC AACCTCCATG      60
GTGCCTCTGG AATTGGGTAG CATGGTGGCC CTGCTGATGA GCACCCCAAG GGGCCATTGG      120
GGGACCTCTG AGAATCTCTG CCAGAGCAGT TTGGGTGGGA GTCGATTAA GAAAGAAGCA      180
GCAAGATCCA GGACTTTTAA TCTTAAAGA GAGAGAAATG CTGGCAGATG AACATTCTGA      240
GGATAAGGAG CCTGACTAAT TGAGCGATTA GGGATGGAGA CATACGATTG AATTCTAGAC      300
CTGCCTCGAG TAGCCAATCA AGCTGTGTCT GGCTGTGCAC TATCCAGGCC TCCACATTCT      360
GTGACAAACT AACAGGGCCG GCTCCTGTCA CTCCTGTTCT CGCCAGCGGG TTTTACCCTG      420
AAGGTGACTC AGGCCTTCTC TTGCCCCTAG ATCGTGGGGA TCATCACACG GCACAACCTC      480
ACCTATGAAT TTCTGCAGGC GTAGCTCGAG                                     510

```

(2) INFORMATION FOR SEQ ID NO:1270:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 388 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1270:

```

GAATTCGGCC AAAGAGGCCT ACGCATCCCC TGCAGCTCTT GCCCCAGAC GTTTGGTACC      60
AACTCGAAAC TGCCTTGCA CCGTTAAGG GTACATGACA AAACACCTAC CCACTTCTGT      120
CCACTTTGTG ACTATAGTGG CTACCTTCGC CATGACATCA CTCGTCATGT CAACAGCTGC      180
CACCAGGCA CCCCAGCCTT TGCTGTCTCC CAGTGTGAAG CCCAGTTCAG CTCAGAGACA      240
GCACTTAAGC AGCATGCTCT GCGCCGACAC CCCGAGCCTG CACAGCCTGC CCCTGGCTCT      300
CCTGCAGAGA CCACTGAGGG CCCCCTGCAC TGTTCCCGCT GTGGGTGCT GTGCCCCAGC      360
CCTGCCAGCT TACGAGGACG GCCTCGAG                                     388

```

(2) INFORMATION FOR SEQ ID NO:1271:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 407 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1271:

```

GAATTCGGCC AAAGAGGCCT ACAGAACTGT GCCATATTCT TAAACATCAT ACAATATTGC      60
CTTTCAGGCA TGAAAAGCAA AGGGAATTAT TTGTTCAATT GATAGCGCT TAGTAATGTA      120
AGTGGATACA CTTAGGCTA GCCCTCTGGC TTGTTACCAT GGTAACTAG GGGAAATAG      180
TTGAGGGGTC TGCAGCAGAG CTTGGAGAGG ATCTGGGATG TTAAATTCTC AAGTACTTGA      240
ACTTAGCAAC AGGACTTGGT CCCATCCACA CCCTGCTCTC CACCCAGCT GGAATAATT      300
AGTGCTGACT ATGGAGGCAA AGAGAAACAT ACTTGTAAGC TTTTGTGTT GGATTTCCT      360
TGGGGTTTCC TTTTGTCTT TTCTGAACTG GAGGGTGAAA TCTCGAG                                     407

```

(2) INFORMATION FOR SEQ ID NO:1272:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1272:

```
GAATTCGGCC AAAGAGGCCT ACATAATCA AAAATTCTG TGAAGATGGG AAATAAGGCC      60
AAGATTGCAA AATGTCCTTT AAGAACAAA ACTGGGCACA TTCTAAAATC AACACAAGAT      120
ACTTGATTG GGAGTGAAA ACTTTTGCAA AAGAAGCCAG TTGGTTCAGA AACATCACAG      180
GCAAAAGGTG AAAAAATGG AATGACTTTT TCATCCACTA AGGATTATG TAAACAATGT      240
ATAGATAAAG ACTGTCTTCA TATCCAGAAA GAGATTTCAC CTGCAACCCC TAATATGCAG      300
AAGACTAGAA ACACCCTCGA G                                     321
```

(2) INFORMATION FOR SEQ ID NO:1273:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 205 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1273:

```
GAATTCGGCC AAAGAGGCCT ACGAGAACTT CCTTTTCATC TGAATCTTCG TCAAACTCTC      60
TCTCAGAGCC TTCTCATCT AACACTTTTT CAGAGCCGTC ATCTTCAAAT TCGGAGTTTT      120
CAGAGTCATT TTCTTCTAAC TCTTTGTCAA GAACATTTTC ATGAAGCTCC TTTTCAGAAC      180
CTTCCTCGTC CAAATCTTC TCGAG                                     205
```

(2) INFORMATION FOR SEQ ID NO:1274:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 450 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1274:

```
GAATTCGGCC AAAGAGGCCT ACTCAATACT GAGGCTGATT GGTGTTTAG GCCAATTGGG      60
TTTGAAAGAA GGATTTCAT CTGCTGTGAA AAATATTAGT TCGGTTATTG GTATGTTTAT      120
ACAGCATGCT CAGCATGAAG ATATACCATG GGGTATACAG TTAGCAGCCG TGTATGCTCT      180
TTGTGACTTG AGTCCCAGCA ATCCAGCAGA AATTTCGAAG ATCCTGGAAG CTGGCGGGAG      240
AGAGGCCTCC AAAAGCGTTC CGTCTGCGAT TGTCAGCTGC CTAGAGGAAG TCAGTGCCCT      300
GAGCACAGAG GAGCTTGGCT GACCTGGGAT GCCACTGAGG CTTGAGAAGT GCCTTGACAC      360
ATTTTGAACA CAAATAGTTT GATCAGCTTT CAGAATACAA AGGGAGGTTT CAAAACAAA      420
AGACATAAAA TAGATAAAG CAGACTCGAG                                     450
```

(2) INFORMATION FOR SEQ ID NO:1275:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 255 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1275:

```
GAATTCGGCC AAAGAGGCCT AAAGCAACAG GAAAGGATAA ATTCACAGAG GGAAGAGATA    60
GAAAGACAAC GGAAAATGTT AGCAAGCGG AAACCTCCTG CCATGGGTCA GGCCCTCCT    120
GCAACCAATG AGCAGAAACA GCGGAAAAGC AAGACCAATG GAGCTGAAAA TGAACGTTA    180
ACGTTAGCAG AATACCATGA ACAAGAAGAA ATCTTCAAAC TCAGATTAGG TCATCTTAA    240
AAGGAGGCTC TCGAG                                         255
```

(2) INFORMATION FOR SEQ ID NO:1276:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1276:

```
GAATTCGGCC AAAGAGGCCT AACAGATTG ACCGTGAATG GTTCACTGTT GAAACTCTGT    60
GATGGGTACT TGAGAATTTA TTATATTATT ATGCCTATAT TGCAGATATT TGAAGTTTCC    120
CAATAAAATG TTTAAATAG TGGCAGGGGG CAAGAAGAAA AGGACCACTC AATTTAAAGA    180
AAAAATAATT TTTAAAGACA CAGAGAATAG GAAGAGGGAA AAATTGGTGA GGCAAGAGAA    240
AGGCAGCAGG TGGGGCCATA TCAAGAGTGA TTCTTCAGCA GGTGAGGCGT GATACCACCG    300
AAAAGTAGA GGGTTGGCTG TAAGATAGGG GGCACAGATG GCTATAATGC AAGGGAAGGC    360
GCTCGAG                                         367
```

(2) INFORMATION FOR SEQ ID NO:1277:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 624 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1277:

```
GAATTCGGCC AAAGAGGCCT ACTCAGAAAC AAAGCCAAA TTAAGTTCAT CATTAAAAAG    60
CCCGAAATGT TTGAGACGGC GATTAAGGAG AGCACCTCCT CTAAGAGCCC TCCAGAAAA    120
ATAAATTCAT CACCAATGT TAATACTACT GCATCAGGTG TTGAAGACCT TAACATCATT    180
CAGGTGACAA TTCCAGATGA TGATAATGAA AGACTCTCGA AAGTTGAAAA AGCTAGACAG    240
CTAAGAGAAC AAGTGAATGA CCTCTTAGT CGGAAATTG GTGAAGCTAT TGGTATGGGT    300
TTCTCTGTGA AAGTTCCTA CAGGAAAATC ACAATTAACC CTGGCTGTGT GGTAGTTGAT    360
GGCATGCCCC CGGGGTGTC CTTCAAAGCC CCCAGCTACC TGGAAATCAG CTCCATGAGA    420
AGGATCTTAG ACTCTGCCGA GTTATCAAA TTCACGGTCA TTAGACCATT TCCAGGACTT    480
GTGATTAATA ACCAGCTGGT TGATCAGAGT GAGTCAGAAG GCCCCGTGAT ACAAGATCA    540
GCTGAACCAA GCCAGTTGGA AGTTCAGCC ACAGAAGAAA TAAAAGAGAC TGATGGAAGC    600
TCTCAGATCA AGCAGAACCT CGAG                                         624
```

(2) INFORMATION FOR SEQ ID NO:1278:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1278:

GAATTCGGCC AAAGAGGCCT ACCCAAATCC CATTAGATA AATTGAGGTT CATTTTTCAC	60
ATAGACTTGC AATTTTGTAGA CACCACATTT TTTTATAGT AACAGCCTCA TTGCCTGTA	120
CAATAACTAA TAATACAGTA TTTCATAGGT ACATTGTATG TGCACAGGAA ATTTTCTTT	180
AAATCTTAAA AGCCTTTAAT AAACGGGATA TTTTAATATT TTAATGTAC TACATTTAAA	240
AAATAGTGTT TTCCTACAAA ATTTTCTGTA TTCAGTAATA CTCGAG	286

(2) INFORMATION FOR SEQ ID NO:1279:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 227 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1279:

GAATTCGGCC AAAGAGGCCT ACTCATCATT AGCTGAAAGT TTGAGAGCTG CAGCAGAAGC	60
GGCTGTATCA CAGACTGGAT TTAGTTATGA TGAAAATACT GGACTGTATT TTGACCACAG	120
CACTGGTTTC TATTATGATT CTGAAAATCA ACTCTATTAT GATCCTTCCA CTGGAATTAA	180
TTACTATTGT GATGTGGAAA GTGGTCGTTA TCAGTTTCAT TCTCGAG	227

(2) INFORMATION FOR SEQ ID NO:1280:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 486 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1280:

GAATTCGGCC AAAGAGGCCT ACCCGTGGCG TCTACAAATA GTTCCGTGAG AAAGATGGCC	60
GGGAACTCGA TCCTGCTGGC TGCTGTCTCT ATTCTCTCGG CCTGTACGCA AAGTTATTTT	120
GCTTTGCAAG TTGGAAGGCG AAGATTAAAA TACAAAGTTA CGCCCCAGC AGTCACTGGG	180
TCACCAGAGT TTGAGAGAGT ATTTCGGGCA CAACAAAACCT CTGTGGAGTT TTATCCTATA	240
TTCATAATTA CATTGTGGAT GGCTGGGTGG TATTTCAACC AAGTTTTTGC TACTTGTCTG	300
GGTCTGGTGT ACATATATGG CCGTCACCTA TACTTCTGGG GATATTGAGA AGCTGCTAAA	360
AAACGGATCA CCGGTTTCCG ACTGAGTCTG GGGATTTTGG CCTTGTGAC CCTCCTAGGT	420
GCCCTGGGAA TTGCAACAG CTTTCTGGAT GAATATCTGG ACCTCAATAT TGCCAAGAAA	480
CTCGAG	486

(2) INFORMATION FOR SEQ ID NO:1281:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 430 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1281:

```

GAATTCGGCC AAAGAGGCCT AGACAAATT CTTTCATTG CTTCCAGCCG TGTATTAA      60
AGTAATTAAC CTTAATTAT AAATTTTAT ATCAAACGTC CTTTAACTT TTAGAACTGG      120
CAGGAACAGC CTTATCCCTG GGCTCCTAAT AGTTCTCCAT TTAATCAAAA TTCATCCATC      180
AGGTTCCAGT GTTAAATCAT CTTTAAATG GGAGTTACAT TCTGGTTAAT AGTTTATAA      240
TTCGCCTCCT CTAATAGTTT TTACCACAGG GATCTCGACT CCATTTTTCG TGACTCTATT      300
ATTGCTGGCA TCGGATTCT GCGGGGATGG CTTAACGCGG CCCTGCCTCT CTGGCCTCTG      360
CTGGTCGCCT CTTTGTCTCT TGGTGGTCTC ATTAATTCCT GAGAAGAGTT ATCCTTCCTC      420
CTCACTCGAG                                     430

```

(2) INFORMATION FOR SEQ ID NO:1282:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1282:

```

GAATTCGGCC AAAGAGGCCT AATCCCCTTC TGCATGTTCC CTTCTGCAG GTCTGATGGG      60
GCCATCCAC CCGTCTGGGG AGCACAGCTT GCCCTCCCTC CCCTCCTTCT CTTCTGGCGT      120
TGCTGTCTGG GTGCCATCGG AGCAGTCTCT ATTACTTCCC ACTTTTGCCC AACTTCTGCT      180
GCTGTGACCA GTCGCATACA CGTGGACACC GTGGGACTG CCCCTCCATA CAGTCTCTCT      240
GTAAGCTTAG GACCAAGGCT GCCTCTCCAG TCTCCCTGGC CCATGCCTGC CCCGGCATCC      300
TCCGCCCCAG CTACACTGGC CCCCATCTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:1283:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1283:

```

GAATTCGGCC AAAGAGGCCT AGGACGTTGG TGTGAGGTT AGCATACGTA TCAAGGACAG      60
TAACTACCAT GGCTCCCGAA GTTTTGCCAA AACCTCGGAT GCGTGGCCTT CTGGCCAGGC      120
GTCTGCGAAA TCATATGGCT GTAGCATTCG TGCTATCCCT GGGGGTTGCA GCTTTGTATA      180
AGTTTCGTGT GGCTGATCAA AGAAAGAAGG CATACGCAGA TTTCTACAGA AACTACGATG      240
TCATGAAAGA TTTTGAGGAT GAGCTCGAG                                     269

```

(2) INFORMATION FOR SEQ ID NO:1284:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 339 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1284:

```
GAATTCGGCC AAAGAGGCCT AGAGCGTCAA TTATATCAAT TTGTCCCAGA TTTGGATGAG      60
CTGTGAGGAT GTAACACAAG GCTGGAGGAG GCAGATGAGT TTTATCTCT TCACAGGGCT      120
GGTCGCGGCC AGGTGTTTTC AGAGGTATCG CTGGGGGCCA CAGGGTGTCA ATCAAACTGA      180
AAATCCCGCG TGTCCTTCCT CTGGTGACTT TCTGTAGAAC CTTCAATCCC ACCAGGCTGC      240
AAGACTTCCC TTCCAAGTGT CTTGCCTTCG ACATGGTGAA CTCCAAGTGC ACTTCACCGA      300
ACATTCCACA GGCATCTTGT ACCAGAAGGC AGGCTCGAG      339
```

(2) INFORMATION FOR SEQ ID NO:1285:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1285:

```
GAATTCGGNN AAAGAGGNCT AGAAATCANA AAGCATGCCT GTGCAATTGA ACAAAGGCT      60
AAGTTCTAAA AACATCAGTT CATCTCCAAG CGTTGAGAGT TTGCCTGGAG GAAGAGAATT      120
CACTGGCTCT CCACCTTCAT CTGCTACTAA AAAAGATTCC TTTTITAGCA ACATCTCAGC      180
TTCTCGCTCA CACAGCAAAA CTATGGGCAG AAAAGAATCT GAAGAAGAAT TAGAAGCCCA      240
AATTTCCTTC CTTCAAGGGC AGTTGAATGA CCTGGATGCC ATGTGCAAAAT ACTGTGCAAA      300
GGTGATGGAC ACTCATCTTG TAAATATTCA AGATGTGATA TTACAAGAAA ATTTGGAAAA      360
AGAAGATCAA ATTCTGTTTT CCCTGGCAGG ATTAAAACAG ATCAAAGACA TTCTAAAAAGG      420
TCCCTGCGT TTTAACCAGA GCCAGCTAGA GGCCGAAGAG AACGAACAGA TCACCAATTGC      480
GGACAACTCA CTCGAG      496
```

(2) INFORMATION FOR SEQ ID NO:1286:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 319 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1286:

```
GAATTCGGCC TTCATGGCCT AGCAGAAGCT AAGAACTGTC TTAAATATAA TTTTAAAGT      60
AAATAAGTTA TAATGCATAG GTTAGCCCAT TCATTAATGA TTTTCAGTTT CAAGTGTAAT      120
TATTTCTTAA TGATTACTAG TTGATCAGTG TAATGAAAC ATTGAGTAGA CAACTAAAT      180
GCACAGTATA AATGTGACAT AAACACTGGT TTCAATTTGT CTCAGAAAAA AAGAAAAAAA      240
AAAGCCCCT GCAATGGCAA AGAGTGGCCA CTATTGGGGT AATTCAAACA ACCCACTGTA      300
ATACAGGAAA GCACTCGAG      319
```

(2) INFORMATION FOR SEQ ID NO:1287:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 261 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1287:

```

AAAATGGAGA AGTTACTGGC TGGAGAAGAT GGGACAAGTG AACGAAGGAA AAGCATCAAA      60
ACCTACAGAG AAATTGTTCA AGAAAAAGAG CGGAGAGAGA GAGAGCTGCA TGAAGCATAT      120
AAGAACGCTC GGTCCCAGGA GGAGGCAGAG GGGATCCTTC AACAGTACAT TGAGAGGTTT      180
ACCATCAGTG AGGCTGTTCT CGAACGCTTG GAGATGCCAA AAATTCTGGA AAGAAGCCAT      240
TCAACAGAGC CAAAACTCGA G

```

(2) INFORMATION FOR SEQ ID NO:1288:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 275 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1288:

```

GAATTCGGCC TTCATGGCCT ACTCTGAAGA TATTTATAGC TCTCTTAGAG GTGTCACTGA      60
AGCAATCCAG AATTTTCAGCT TCCGTAGCCA AGAAGATATG AATGAGCCAT TGAAAAGGGA      120
TTCTAAAAAA GATGATGGCG ATTCAATGTG TGGTGGTCCT GGGATGTCTG ACCCAAGAGC      180
AGGAGGTGAT GCTACTGACT CAAGTCAAAC AGCTCTTGAT AATAAAGCTT CATTGCTCCA      240
TTCAATGCCT ACTCACTCCT CTCCACGCTC TCGAG

```

(2) INFORMATION FOR SEQ ID NO:1289:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 139 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1289:

```

GCGATTGAAT TCTAGACCTG CCTCGAGAAC GCCGGGGTCC ATCATTAGCA GTCCTCACAT      60
GCGCCCGAGA GCTACATCAA CACGAGAGTG TCCATCTCGC CCACACCAGA CTATGCCCAA      120
CTCATCTTCC CCCCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1290:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 358 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1290:

GAATTCGGCC	AAAGAGGCCT	AATAAGTTTG	ATTAAGCTTG	CAGACATTAA	GCTTTTCTAG	60
CAGCTGGTGT	GTGCAGAGGC	AGATGGCTCT	CTGGTTCCAG	GACTACCTAC	AATATAGAGA	120
AATTTTCTCT	ATTCCAGTCA	ATTCATCATG	GGTAAGAATA	GTCCATTTTG	GTAGTGTTAT	180
TTTCATCGTTT	ACAATCTACC	TATGGGTAGT	GGCTGGTAAC	TGCCTGGATG	TTGACATTTT	240
ACAAAGGCCA	TACTTAACCA	CACTTTTATT	TCTATTGTG	CGATGCCTTG	GAGTAGTTTC	300
CCAAAGTGAT	TTTGAGTGTG	GAAGAAATGG	TATTGTCCCC	GAACAGCTGG	TGGTCGAG	356

(2) INFORMATION FOR SEQ ID NO:1291:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 139 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1291:

GAATTCGGCC	TTTCATGGCCT	AGAGGATCCT	AATGAAATAC	CTGAAACATA	TATTGGCATT	60
TATCAATGGC	TCAAATCTTC	ATTTATCTCT	GGCCTTAACC	CTGGCTCCTG	AGGCTGCGGC	120
CAGCAGAGCC	CAGGTCGAG					139

(2) INFORMATION FOR SEQ ID NO:1292:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 442 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1292:

GAATTCGGCC	TTTCATGGCCT	ACTATCAGGA	AGTGATTCGT	GGAGAGGGGA	TTTACCTGA	60
TGGTGGAGAA	TACAAACCCC	CTTCTGATTC	TTTGAAAAGC	AGAGACTATT	ACACGGATTT	120
CCTAATTACA	CTGGCTGTGC	CCTCGGCAGT	GGCACTGGTC	CTTTTCTAA	TACTTGCTTA	180
TATCATGTGC	TGCCGACGGG	AAGGCGTCAT	CCAACTGGTC	CATCACAGTG	CTATTCAGAA	240
ATCTACCAAG	GAGCTTCGAG	ACATGTCCAA	GAATAGAGAG	ATAGCATGGC	CCCTGTCAAC	300
GCTTCCTGTG	TTCCACCCTG	TGACTGGGGA	AATCATACCT	CCTTTACACA	CAGACAATA	360
TGATAGCACA	AACATGCCAT	TGATGCAAAC	GCAGCAGAAC	TTGCCACATC	AGACTCAGAT	420
TCCCAACAG	CAGACTCTCG	AG				442

(2) INFORMATION FOR SEQ ID NO:1293:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 231 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1293:

```

GAATTCGGCC TTCATGGCCT ACATGAATTA TCTGTGAGTT GGTAAAGGT AATATGGTT      60
AGCATCAAGA ATAGGAAGCT ATTAGTTTTC AATCAAGAAT AAGCTCAAA TGGTCTAAA      120
TCTTAATTTT AAGCTGGGTA ATCATTGATT TACAATTTT TTCTTGGTGT CACATTTCTT      180
CCAAAACAAT AATCAATGAA GCCTTCCCA CCCTGTGCCT TTGCTCTCGA G              231

```

(2) INFORMATION FOR SEQ ID NO:1294:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 355 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1294:

```

GAATTCGGCC TTCATGGCCT ACTCTGCTAA CTCCTGCCT CTATGTCTTT CCCACCTAC      60
CTCCTCTCCC CATTCACTCT CCTGCGTGAC CTCATCCATT TACCTGCCTT CAATTAGCAT      120
CCATACGTTC CTCCTTCTC AATATAAGTC CCCAGCTGAG ACTCTGTTTC TGAATCCAG      180
ATTTTATTTT CCAATCTAC TGAACAACT CAGTCTAAAG CCAAGCCCAT TATCTTCTCC      240
TATAAGCCTG CATCTTTCT TTTCTTCTT TCTTTTTTT TTTTAAACAG AGGTTAATGG      300
CATTCAACAT CTACCCAAGC ACCAGGGAGT TAGATTGAGA ACGGATGGAC TCGAG          355

```

(2) INFORMATION FOR SEQ ID NO:1295:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 429 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1295:

```

GAATTCGGCC TTCATGGCCT AGGCTAACTG TTATTGTCAT CTTACAGCTC AGAAAACAAG      60
CATGGTGAGA TAAGGAACTT TACTAAGGT CACATAACTA GTAAGTGGTG GAGCCAGCGT      120
TGAACTCAG GAAGTCTGTA CAACTGGG AGGGAAGGCT AATATTTGAA ATGATAGACT      180
CAACATTCAA TATTTCAGTA TCGATGAGCT CTAAGTTGAT AGAGCTATGT GTAAAAACCC      240
TGCATTTAAT ATTAAGAAAT CATTGGCAGA AGAGTAAGAG AGGGCTTTGG TCAAGTAAGC      300
TGAGTGCATA AGAAACTCT GGCATTGAG GTGTCCTTAG CTCCAGATGC TTGGTAGGG      360
CAGAGTGTAT CCATGGAGGT ACCATGAGCT ACCATGAGG TAGCTCAGAG AGGAAAGGGA      420
AACCTCGAG                                     429

```

(2) INFORMATION FOR SEQ ID NO:1296:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 406 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1296:

```

CTCGAGCTGT TCTGTAAATA CCTGGTGCTA ACATCCCATG CCGCTCCCTC CTCACGATGC      60
ACCCACCGCC CTGAGGGCCC GTCCTAGGAA TGGATGTGGG GATGGTCGCT TTGTAATGTG      120

```

```

CTGGTTCTCT TTTTITTTTC TTTCCCTCT ATGGCCCTTA AGACTTTCAT TTTGTTTCAGA   180
ACCATGCTGG GCTAGCTAAA GGGTGGGGAG AGGGAAGATG GGCCCCACCA CGCTCTCAAG   240
AGAACGCACC TGCAATAAAA CAGTCTTGTC GGCCAGCTGC CCAGGGGACG GCAGCTACAG   300
CAGCCTCTGC GTCCTGGTCC GCCAGCACCT CCCGCTTCTC CGTGGTGACT TGGCGCCGCT   360
TCCTCACATC TGTGCTCCAT GCCCCTAGGC CTCTTTGGCC GAATTC                     406

```

(2) INFORMATION FOR SEQ ID NO:1297:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 639 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1297:

```

GAATTCGGCC AAAGAGGCCT ACGCCCGCCA ACACGCCTGG GTAATTTTTT GTATTTTITAG   60
TAGAGACGGG GTTTCACCGT GTTAGCCAGG GTGGTCTTGA TCTCATGATC TCGTGATCCA   120
CCTGCCTCGG CCTCCCAAAG TGCTGCGATT ACAGGCAAGT GCCACCGCAC CCGGTGACAC   180
TGTGTGCTCTT AAGCAGAAGC AAAATCAAAA GGCAGACAGG ACTCAAAGAA TGGTTCTAAA   240
CCTAAAAGTA CTAAGGCCTC TAGGAACTAT GATGATGACA ATTACTGTGC AATTATATATC   300
ATGCTGAATT TTAGTAAAC CCCTGGCAAA CCACTCTCAC TTGGTGACAC TCCGTCCACA   360
GCACGGGGCC ACAGCATAGT GGATCAGTAC AACTTTCCTG GACAGCCTTG CTACCTGTAC   420
ACTCTTATGG ACTCAATTCC ACTTCAATGT ATTCGTTCTA GAGGTAAATG GACATGTGAA   480
CACAGATTCA CAGGCAAAGA TGTATATATG CACCACTGTC TTGATGTTCA AGAAAAATGGA   540
ACTGGTTACA TGCAATGTAT TAGCTATATA ATGTAAGTGT ATTCAGCCCC TAAAAAATGT   600
AGGCCTCTTT GGCCGATTGA ATTCTAGACC TGCCTCGAG                               639

```

(2) INFORMATION FOR SEQ ID NO:1298:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 606 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1298:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTCC AACGGCATCG ACGTGTACCC CCAGAAGGAA   60
TTTGATGAGG ACTCGGAGGA CCGGCTGGTG AACGAGAAGT TCCGGGAGAT GATCCCATTT   120
GCTGTGGTGG GCAGTGACCA CGAGTACCAG GTCAACGGCA AGAGGATCCT TGGGAGGAAG   180
ACCAAGTGGG GTACCATCGA AGTTGAAAAC ACCACACACT GTGAGTTTGC CTACCTGCGG   240
GACCTTCTCA TCAGGACGCA CATGCAGAAC ATCAAGGACA TCACCAGCAG CATCCACTTC   300
GAGGCGTACC GTGTGAAGCG CCTCAACGAG GGCAGCAGCG CCATGGCCAA CGGCGTGGAG   360
GAGAAGGAGC CAGAAGCCCC GGAGATGTAG ACGCCACCCT GCCCACCCTT GGGATCCTGC   420
CCCCAAGTCA TTTCCGTCCC CCCCCAGGC CCTCCTCCCA CGGAGTGGCA AGACTGGCTG   480
AGGCCTAGCT CTCTAAAACG GTGGGGGAGG GGGGAGCGCC CTGAGAGAGG CATTTACTTA   540
ACCCACCCCC AATCACCCTT ATTTTACTC TTTCTACTTT CGGAATTGGA AAGAACGACA   600
CTCGAG                               606

```

(2) INFORMATION FOR SEQ ID NO:1299:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1299:

GAATTCGGCC AAAGAGGCCT AGGAGTGATG TTCATTTTGG GATTTCAGG GTGCATTGGA	60
GCGCTACGGG AAAACACTTT CCTTCTCAAG TTTTCTCTG TGTTCTGGG AATTATTTTC	120
TTCTGGAGC TCACTGCCGG AGTTCTAGCA TTGTCTTCA AAGACTGGAT CAAAGACCAG	180
CTGTATTTCT TTATAAACAA CAACATCAGA GCATATCGGG ATGACATTGA TTGCAAAAC	240
CTCATAGACT TCACCCAGGG ACTCGAG	267

(2) INFORMATION FOR SEQ ID NO:1300:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 414 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1300:

GAATTCGGCC AAAGAGGCCT AGTGTCTTCC AATCAAGTTA ATAAATATCT GTCTTCGTAC	60
CAGGAAAAAT TCAATATTAT TTAAAGGAG AAAAAATAAG AATGTATTGG TAAATGCTT	120
TCTCTCACTT CGAAATATCT TAGTGAACAA GAACACTGAC ATAGAATTAA AATTCTATGA	180
ACAGCCATAA CCAAGGAAT CTCATTTAGT GAATATTTAT GTCCAGTAAC TGCAACCCAC	240
ACTTAGAGCT ATCCTTTTGC TTAATAACAA AAATTGGGC CTTAAGAAGT GATTAATATC	300
AGGCAAAAAT AAATTATACT TTTGTTTATT TATTCAGGGC CTGCTCTGCT TGCCAGGGCT	360
GGACTGCACT AGTGCAATCA TAGCTCACTG CATCCTTGAA TTCCTGGGCT CGAG	414

(2) INFORMATION FOR SEQ ID NO:1301:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1301:

GAATTCGGCC AAAGAGGCCT AGTGAAGTTT ACTGTGATTC TATGGAACAA TTTGGACAAG	60
AAGAGTCTTT AGACAGCTTT ACGTCCAACA ATGGACCATT TCAGTATTAC TTGGGTGGTC	120
ATTCCAGTCA ACCCATGGAA AATTCTGGAT TTCGTGAAGA TATTCAGTA CCTCTGGAA	180
ATGGCAACAT TGGGAATATG CAGGTGGTTG CAGTTGAAGG AAAAGGTGAA GTCAGCATG	240
GAGGAGAAGA TGGCAGGAAT AACAGCGGAG CACCACAAC CGAG	284

(2) INFORMATION FOR SEQ ID NO:1302:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 193 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1302:

```

GAATTCGATT GAATTCTAGA CCTGCCTCGA GCCTGTGCGA GAAAAGTGAA CGCCAGTCTA    60
AAAAAAAAAA AAAAATCTAA AAGAAGCCAA AAATCCACTT GTAATGAGAT TCATAGACCC    120
CTTATTTATA CAACTCACAT ATTTGAATTT TTACATATTG AATTTTCTTT TAAAGGGGTG    180
GAGGGGTCTC GAG                                                         193

```

(2) INFORMATION FOR SEQ ID NO:1303:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 305 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1303:

```

GAATTCGGCC TTCATGGCCT AGGGATACAG CAACTATTTT ATCAATTGTT TGTATTTCCT    60
TTTAAGGTAA CATTTTAAAT GAAATGTATT ATATTTTAAT CTATCCTTTT CCTTTGTTTT    120
TGTTCTTATT ATCTTCTTG ATATATAACC AAAAAATGAA AAAATCTGTA CACTTGGTGT    180
TTGATTTACC TAAGCACCTA GTTAATTTAA TCTTTGTAAC ACTTTGGATG GTTAACCTAA    240
CCTTTACTCA AGTTGGTTTT TGTTTGTTG AAAATGACTT ACTTGGTGGA ACCACTACTC    300
TCGAG                                                                    305

```

(2) INFORMATION FOR SEQ ID NO:1304:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 416 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1304:

```

GCAGCGAGCA GTATACCAGC AGCAGCAAGC GAAAGGAAGA GTTTGCTGAT ATGTCAAAAG    60
TTCATTCAGT GGAAGCAAT GGGCTTCGG ACITTGATTC AGAATATCAG GAGCTCTGGG    120
ATTGGCTGAT TGACATGGAG TCCCTTGTA TGGACAGCCA CGACCTGATG ATGTCAGAGG    180
AGCAGCAGCA GCATCTTTAC AAGCGATACA GTGTGGAAAT GTCCATCAGA CACCTGAAAA    240
AGACGGAGCT GCTTAGTAAG GTTGAAGCTT TGAAGAAAGG TGGCGTTTTA CTACCAAATG    300
ATCTCCTTGA AAAAGTGGAT TCAATTAATG AAAAATGGGA ACTGCTTGGG GTATTTCAT    360
TTTTATTACT GTTTGTAGGT TATGTGTACA TTTTTCGCT AGTGAAGTCA CTCGAG        416

```

(2) INFORMATION FOR SEQ ID NO:1305:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 345 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1305:

GAATTCGGCC	TTCATGGCCT	ACCAATGTCC	TGCACATTGC	CAGACTTCCA	AACAGGTACA	60
AGTTCCCATC	TGTTCTGCAA	TAGATGAAAG	CAAGTCACAG	TTCCCAGGGC	TACCAAGTGA	120
ATTTCTCAAG	TGGCCAAGTT	ACCTGGCTTC	ATGGCTTGAC	CTGCTGTGTT	CTTTTGAAAA	180
TGGAGAATGC	CTGAGGGCTG	TCTCTAACAG	AAGGGTATGT	GGCAGTATAT	TACAGAATTT	240
ACAAGAAGCA	AGGTGCAAAT	GAATTACATT	GAATTCATT	GTTAAGAAGA	GATGATTTAA	300
AATTGGTAT	TTAACACAT	AAACGACTTT	GGGGCCCAAC	TCGAG		345

(2) INFORMATION FOR SEQ ID NO:1306:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 209 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1306:

GATTTCTCTC	AGCTTTTATT	TGTTTGAAAA	ATTTTTTAAT	TCACCTTCTT	TTTGAAGA	60
TTTTTACTGA	TTATAGAATT	CTAAGTAGTT	TATCTTCTA	GGACTGTGAA	CATATAATTC	120
TACTGTCTTC	TGGCATTAT	AGTTCTTTA	TTTTATTTT	TATTGAAAA	CATTTTTTTT	180
GAGACATGGT	CTCACTCAGA	ATACTCGAG				209

(2) INFORMATION FOR SEQ ID NO:1307:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1307:

GAATTCGGCC	TTCATGGCCT	AAGCTTTTGC	TTTTTTAATA	ACTTGATAG	CTAAAACTT	60
GACGGTGAAA	AGCTCTCAGA	TCAAAGCTGA	TCCTTCTGTC	AGTAATGATT	CTAAAAATAA	120
GCAAGATTTT	AATGGGGAAT	ATATTTTATT	TCATTCTTAT	CTCAAACCTA	GGTACTGTGG	180
TCGTTTTGAG	TTCATTTCGA	GGCATTTC	ATGTGCCTCA	GGCCACATCC	AACCTCTCCC	240
CAGAACTCGA	G					251

(2) INFORMATION FOR SEQ ID NO:1308:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1308:

GAATTCGGCC	TTCATGGCCT	ACCTGACTCT	TGAGATACTG	ACTGGAAGAT	AGACTGTTTT	60
GTTCCACCTG	ATTGTATGGG	AGAAATTTT	GACCTTAGAA	AGTGGAATG	AGGTTGCTAT	120
GGAAACTGGT	AATTCTGCTG	CCACTCATAA	ACTCTTCTGC	AGGTGATGGT	CTTTTAAGCC	180
GTCCTATTTT	TACTCAGGAG	CCACATGATG	TCATTTTCC	TTTGGATTTA	TCAAAATCTG	240
AGGTCATCCT	GAATTGTGCT	GCTAACGGTT	ACCCTTCGCC	TCATTATAGG	TGGAAGCAAA	300

ATGGCACAGA ACTCGAG

317

(2) INFORMATION FOR SEQ ID NO:1309:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 412 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1309:

GAATTCGGCC	TTCATGGCCT	ACACAGTATC	ACTAAAAGAT	TTTCATTCGG	AAGATCACAT	60
TAGTAAAAG	ACTGAGGAAG	TGTTCTGAA	AGATGGAAGA	ATTGAAAGAC	TAAAGTTAGA	120
GCTTGAAAG	AAAGATGCTG	AAATCCAGAA	GCTGAAAAAT	GTAATCACTC	AATGGGAGGC	180
AAAGTATAAG	GAAGTAAAGG	CAAGAAATGC	ACAATTATTG	AAAATGCTTC	AGGAAGGTGA	240
AATGAAAGAT	AAGGCAGAAA	TACTTCTGCA	AGTTGATGAA	TCACAAAGTA	TCAAGAATGA	300
GCTCACTATT	CAGGTGACTT	CACTTCATGC	TGCATTAGAA	CAAGAAAGAT	CTAAAGTGAA	360
AGTATTACAA	GCAGAGTTAG	CCAAATACCA	GGGTGGCAGA	AAAGGGCTCG	AG	412

(2) INFORMATION FOR SEQ ID NO:1310:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1310:

CTCGAGTGTG	GTGGTATGTG	AATTATATCT	CAGTAAAGCC	ATCACAGGGC	AGAAGAAAAA	60
GAGAAAAGAA	AAAGAAAACC	TTCGAGGAAG	TCCAACAAAA	AACATGAGGA	AGAAAAGGTG	120
AGAGCCTGAG	GATCCACACA	GCAGGTACAG	CAACTAACTG	ACAGAAATTC	TAGAGCCAGA	180
CAACAATGAC	TAATCAAAC	AACCTCAAAA	CAAATGATTA	GGCCATGAAG	GCCGAATTC	239

(2) INFORMATION FOR SEQ ID NO:1311:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 278 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1311:

GAATTCGGCC	TTCATGGCCT	ACAAGGAAGC	ACAAGGAGAA	AATTATGATG	AAATGGAGCA	60
AAACAGGTAA	GAGAGAGGGT	CAGAGAAGTG	AATGTGGGCC	TTGATGCTGA	AGCCATTGGA	120
GGGTTTCTG	TTGAGGAGGA	GTATGGGAAT	GATATGATCT	GACTTATGTT	TCAAAAAGTG	180
TACTCTAGCT	GCTTTGTGGG	AAATATNGGA	GGGAGAGAGC	AGAATCAAGG	AGGCCATTTA	240
AAATGCCATT	GCAATATATC	AAGAGAGGCG	GACTCGAG			278

(2) INFORMATION FOR SEQ ID NO:1312:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 247 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1312:

```
GAATTCGGCT TCATGGCCTA ATCACATATG GTAGAGATTT TATACAGAAT TTTAAAATGT   60
GGCATTAAAA AAACCTTGTC CATGGAAAAC TGCTTCAGA GATTTTAAAT AAGTGTTTCT   120
CTCACATAGG AACCTAAGCT TCTCAGAGCT TTTAATAGGC TTCTAACAGG CTAATAGTCA   180
AGGCCGTGAC CCAAGAAGGG ATATAGTTCA CAGTGTTTTC CACAAATATT TCACCCGAGA   240
GCTCGAG                                           247
```

(2) INFORMATION FOR SEQ ID NO:1313:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 311 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1313:

```
GAATTCGGCC TTCATGGCCT AGGGTCTTAG CTTGGGCTCT CCTTGCAAAG TTATTTCTAG   60
TTAATTCATT ATGCAGAAGG TATAGGGGTT AGTCCTTGCT ATATTATGCT TGGTTATAAT   120
TTTTCATCTT TCCCTTGCGG TACTATATCT ATTGCGCCAG GTTTCCTCTG TCTCAAAAAA   180
AAAGAAGTTA CTTCCAAGAC AGACTTTTAA GATGTAACCA GCACAAAGCA ATGTCAGGGA   240
GGAGTGATAC ATGACAATAA ATGAGTCAGA TGAGCAAGAA GGCCCCAGAA CCCATGCCCC   300
CAGGACTCGA G                                           311
```

(2) INFORMATION FOR SEQ ID NO:1314:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 261 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1314:

```
GGGGAGCTGC AAACGCCCGC GATACTGTCA GAGATGGAGA AAGGTATGAC AGGAAGAGCA   60
GATCAAGAAG ACGGGAACAG CACGAGGCAC TGGGAGCTGC AAACGCCCGC GATACTGTCA   120
GAGATGGAGA AAGGTATGAC AGGAAGAGCA GATCAAGAAG ACGGGAACAG CACGAGGCAC   180
TGGGAGNTGC AAACGCCCGC GATACTGTCA GAGATGGAGA AAGGTATGAC AGGAAGAGCA   240
GATCAAGAAG ACGAACTCGA G                                           261
```

(2) INFORMATION FOR SEQ ID NO:1315:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 326 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1315:

```
CTCGACTTGC ACGAGGAGTG GCAGGATTAT CTGCAGAGGG ACCATTGSGA CAGCTAGTAA    60
GGCCAGGTGC TCTTTAGGCA CCCCTTCTTC CACCAGCTTC AGGCCTGTCA CAGCATCAGC    120
TGCTGAGAAG CCAATCTTTG ACGTTAGAAT CAGAAGGCAA AAGGCCAGAA CTGCTGGCAT    180
TTTTATAATT GAGAATAGCA GCTTGTAAGT GTCTGTGATC CCTGGGCTCT CTTCTTTTAC    240
TATTGACGCT TCTCTGTTTT CTTTTTTCAG AAGGGCTACT AATGTTGTTG TTATTAATAA    300
TACAGTAGGC CTCITTGGCC GAATTC                                         326
```

(2) INFORMATION FOR SEQ ID NO:1316:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 244 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1316:

```
GAATTCGGCC TTCATGGCCT AACGTCACCTC ACTGTCCTTC TTAGTATCTA ATTCTCCTTC    60
ACCTAATAGA ACAGCAAATT CTTTGAGTTT AGGATCCTTA ATGCAGTGTA AATATTGCCT    120
TTTATCCTTC TTCTCAGCTA TGGTCTCAAT TCAAATCATG AGGACCATTG TGGTGGCTCC    180
CGAATGGCCT CACTGTTCCA CTCCTTCCCC ACTGCGCTAC AGTCCATTCC CCAGTGTCTC    240
CGAG                                                                    244
```

(2) INFORMATION FOR SEQ ID NO:1317:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 149 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1317:

```
GAATTCGGCC TTCATGGCCT AGAAAGGTTT GCCTGGTAAG ACTGAACTGT TCATAGTTCT    60
TTAAATAAGC TACAATATTT CCTAATTGTG TACCCTTGAT TTTACTGTTT TCTTGCCCTA    120
GAATGCTGTT TCTATCATTC TTCATCGAG                                         149
```

(2) INFORMATION FOR SEQ ID NO:1318:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 302 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1318:

```

GAATTCGGCC TTCATGGCCT AGTCAGCAAA GCAAGGGGAG GCAGACCACA GGCCTCATGA      60
CTCTCACTGG AGTGCAATGG GACCCCATG GGGTGAAAGC AGAGGAGTGA GCTGCTCTGA      120
TGTGAGCACT CACTCTGCTT GCCATATAGT GAGTAGACAG GAGAGACCAG GGCAGAAAGTA      180
AGAAGACCCA TCAGAGGCTC CTCAGGAACC CGAGTGGGAG ATGGTGGTGG AACAGGGTTG      240
TAGTAGTGGC AGTAGTGAAA AAATGATCAG GTTTTGAAA TATTGGAAG GTCGAACTCG      300
AG                                                                 302

```

(2) INFORMATION FOR SEQ ID NO:1319:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 219 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1319:

```

GAATTCGGCC TTCATGGCCT AAGAAAAAA GAAAGAAAGA AAAAGAAAG TACAAGTTTA      60
TAAAGTATTA TAGTGAAAAA TTGCGATTCT GGCTGATTTT AAGCCATTTA AAATTTATAT      120
AAAACAACCT TCCATAAAAA TTTGACAGGT GCCCAGATGT TGCTTTCTCC ATTTATTTTT      180
TGTTTTTTT TAATCACAGT GGTCTTGAGG CAGGTGCGAG                                219

```

(2) INFORMATION FOR SEQ ID NO:1320:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 361 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1320:

```

GAATTCGGCC TTCATGGCCT ACTGAGTTAG GTTTTATTAA TGCAAGTTTT ACAGATGAGG      60
CTACTGTGAC ACAGAGGGCA TAAACTTGTC AAAGACATGC AGCAAAACAGG ACAGACAAAT      120
CTGAAGCCAG GTTGTCTAAG CTCAGAATCC ACACCTATAA CCGCTGTACC CCACTGCTTT      180
TGCCAGCAGG AGCTCACGTA CTTAGGACAG ACAATCAGTA CAGTGCTAGG CTCACTGAAG      240
GTGTTGAACA AATGTCTGTT CACTCTTTT GTTCTCAAAA GTACCAGGAA AGGCCAGAAG      300
AAAAAACTAC AAGACTTAGA AACTACAATG GATCAGATCA CTCAGTAGCA CCTCACTCGA      360
G                                                                 361

```

(2) INFORMATION FOR SEQ ID NO:1321:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 66 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1321:

```

GAATTCAAAC GAAAGCCAGC TGAGAATACA GGAAACATGT TTCCAGCCAA ACCCAAAACA      60
CTCGAG                                                                 66

```

(2) INFORMATION FOR SEQ ID NO:1322:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 317 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1322:

```

GATTGAATTC TAGACCTGCA GCTACAGAAG TCAAGATTCC AAAACCAAGA GGCAGACCCA      60
AAATGGTAAA ACAGCCCTGT CCTTCAGAGA GTGACATCAT TACTGAAGAG GACAAAAGTA      120
AGAAAAAGGG GCAAGAGGAA AAACAACCTA AAAAGCAGCC TAAGAAGGAT GAAGAGGGCC      180
AGAAGGAAGA AGATAAGCCA AGAAAAGAGC CGGATAAAAA AGAGGGGAAG AAAGAAGTTG      240
AATCAAAAAG GAAAAATTTA GCTAAACAG GGGTTACTTC AACCTCCGAT TCTGAAGAAG      300
AAGGAGACGA TCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1323:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 106 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1323:

```

GAATTCGGCC TTCATGGCCT ACTGTAAGGA GGAGATGAAA GAATTAGTAG AAAAGGTTTT      60
AAAAACAGTT ATTATACTA TATCCATAT GCTGAAGGCG CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1324:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 257 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1324:

```

GAATTCGGCC TTCATGGCCT ACTCCTTTAT TTCCTTTGTC TGTAAGATAA AGTCTTAGAA      60
TAATATTCCT GTTAAGGCCG TGCTTATCCC AATACCGTAT CCATACTGAA CTTTCAGTTC      120
TTTATATGCA CTCTACTCTC TGTCTTTCAG ATTTTTCGAG GTATTCCTTT AGAACACTCT      180
TTCTCTTCCA TCTTATCGCC TACTCTTTGG GTTCTGTTT AAACATTACA TTCTCGGTG      240
GGGGGGCTTA TCTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1325:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 78 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1325:

```
CTCGAGACCG CAAGCACTTC CCACCTCATC CTTATTTCTT CTATCCCTTT TCATTGTTTT    60
TTTCTCCTTT TTAAATTC                                                    78
```

(2) INFORMATION FOR SEQ ID NO:1326:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 312 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1326:

```
GAATTCGGCC TTCATGGCCT AGAATTGTCC TCTGTGGAAG GGACTTTCTT TTGGCCCTAG    60
GCCCCTTCCT GCCCTGTGCG TCAGCAGAGA GATGGAAAAC TTGATGACTA GCTCCACCCT    120
ACCGCCCTTT TTGCAGATG AAGACGGTTC CAAGGAGAGT AATGATCTGG CTACCACTGG    180
GTAAATCAC CCAGAGGTTC CATACTAGT TGGCGCCACA TCATCCACCA ACAATCCAGA    240
ATTTGTGGAG GATCTCTCTC AAGGTCAGTT GCTTCAGAGT GAGTCTTCAA ATGCAGCAGA    300
AGGCACCTCG AG                                                            312
```

(2) INFORMATION FOR SEQ ID NO:1327:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 411 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1327:

```
GCGATTGATT CTAGACCTGC CTCTCCTTCA AGCATTGCAG CAAACAATTG TACTGTGAAT    60
ACGTCATCAA TTGCAACGTC TTCAATGAAG GGTCTTACGA CTACAGGAAA CTCGTCTCTT    120
AATAGCACAT CTAACACTAA AGTATCAGCA GTGCCTACAA ATATGGCTGC CAAGAAAACA    180
TCTACCCCA AAATAAATTT TGTGTTGGT AATAAGCTGC AGTCAACAGG AAATAAGCA    240
GAAGACACAA AAGGAACCGA ATGTGTTAAA AGTACTCTG TCACTTCTGC TGTGCAGATT    300
CCTGAAGTAA AGCAAGACAC AGTGTGAGAA CCAGTCACAC CTGCATCTCT TGCTGCTTTA    360
CAGAGTGATG TGCAGCCAGT GGGCCATGAT TATGTGGAAG GGATACTCGA G            411
```

(2) INFORMATION FOR SEQ ID NO:1328:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 286 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1328:

```

GAATTCGGCC TTCATGGCCT ACTTTTCCT TGGTCAGATC ACAATGCTCC TATAAATGTT      60
TCACATAACA TGCTTACTTG TGGGTATACC CTCCTTATCT CCTCAGGGGC TAATTTTGGG      120
AAGGGACTAC TGTCTTACT TTAAGTTAA ATATAAACTA AATTCCTTCC CTAGTTAGCT      180
CAGCCTACGT GCAGAGATAA GCAAAAGTAG TTAACCTAAA AGATATCACC CTTTGGGGGG      240
TGTGAGAGGC AAAATAGAGT CAGTCATGCT AAGCTCCCCT CTCGAG                      286

```

(2) INFORMATION FOR SEQ ID NO:1329:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 340 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1329:

```

GAATTCGGCC TTCATGGCCT AGGGGGATTG AAGATTTTTT GTAGGTGGAA GGCCTGAAGT      60
GCGACTAGAG GGCAATAAAT TCAAGGTGGG AGACTGTCTG CTGATGTTCA TTCCACTGGG      120
CTGTTTATGG ACTGGGCTGT TAGTGCTGGA GTGGCTACCC TGGGCAACTA GTGCATTGGG      180
ACTGGAATA CTTGGGGATA CAGTAGGCTT GGGAGTTGGG TTGGATTAG AAATAAGTTT      240
AGTTGATACT GAAGGCTTAG CTGACAGAGA GGGCTTGGGT GAGGCAGAAG GCTTAGGCGA      300
GGGCAGGGGT TTAGGAGATG TGGCAGGTCT AGAATTCGAG                      340

```

(2) INFORMATION FOR SEQ ID NO:1330:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1330:

```

GAATTAAAGA GGGCGATATC ATCACACTCA CTAACCAAAT TGATGAGAAC TGGTATGAGG      60
GGATGCTGCA TGGCCATTCA GGCTTCTTCC CCATCAATTA TGTGGAATTT CTGGTTGCCC      120
TGCCCCATTA GGATGTTATG CTGGCTGGCT GGCCTCCTCT TGACCCAGAT AGTTACGGTT      180
AACCAGTCTT TTGGCAATGC TGCTTATAAC ACATCCCAAG TGCAGGCCGC AGTGGTCCAC      240
GTCATCCAGC CCCACCAAGT GACTTTGGTT GACTTGTGGG CTCCACAGG ACTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:1331:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1331:

```

CTCGAGTCCG CTGAGCTGAG AAGCACTGCG ACTTTTCCGT GACAGACCAA CGATAGCTAC      60
CATTTTGGCA CCAAGGCTAG AGCGCCGCTT TTTGCCACTG GTGCCCAAGG TGCCCACTGC      120
AGTGTGAGAC TGGCTGCCAT CATTCTTCTC CAGTGAGCAC ATGTCTCCAC TGATGCTGGT      180
GCTTTTGTGC ATGTTCTTCC CTGATATGCC CATTGTCTG CTTTGCAATT TGGATGTAAA      240

```

GACACTGTCA GCCGATGGAT CATTAAAAGT GAGGACAAGA GTAAAAAGGA AAAGACAGAA 300
AATGCATTTT AGATAAAACA TTTGGAGTAT AATTTAGGCC ATGAAGGCCG AATTC 355

(2) INFORMATION FOR SEQ ID NO:1332:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1332:

GAATTCGGCC TTCATGTGCG GTGAAGGTCC TGTGATTGTA CAGTTAGCAC ATTTTATATG 60
ACAGTATAAT CTTAAAAAT AACATAGAAA CAGAAACATT AGAAACGTAA GTCACAGTTT 120
GTGAGTATGT CATTTTT TAG GGAAAAATAA AATATAGTAA CGATTATGA GGGCCCAAAG 180
TTTTATATAA AAATGAAAA GCTGTTTGGC AGTTAGGACT GACTGTAGCC TTCTGTCAAA 240
TCAGTCTTGA CAACTGTTAA AAGACATTAT CATCACAAT AGGGCTGCAT TTCACTCTGT 300
CTGTCAAATA CAATCAATAT ATATGACTTT AAGAAAGTGT GACCATTTC CCAGAGTGAC 360
ACCAACAAGA TGGTGAATA GGAATTTT TTTAACTTTA CTCACCTCAC AGAAATCCAA 420
CTAGCAACTA ACCTCGAG 438

(2) INFORMATION FOR SEQ ID NO:1333:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 309 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1333:

GAATTCTAGC CCCACCCACT TTCTCAGACA TCCCCACCG AGGATCCCAT CAGTCACAAT 60
CCTCACTAAT TAGACCATT CAAATCCCCA AAATAAAAA AGGGAAAGAG GTATAGACTT 120
ATCTTAAGGG TCTTAAGTTC TGGCATT TTT CTATTTAATA ATATATATTG CTATAAAATG 180
GAATTACTAC CAAAATTTAG AAAATCTTT AGCAGAAGAT ACAGCCCTAA TCTTACCACT 240
CCAGTACAAT CATTATTGAC ATTTATGATG TACTTCGTTA TAGTATCAAA ACAATTCCAG 300
TATGTGAAC 309

(2) INFORMATION FOR SEQ ID NO:1334:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 243 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1334:

GCGATTGAAT TCTAGACCTG CCTCGAGCTG CCGTGTTTT CATTTTAATT GTGTGACATA 60
AAATGTAAAA TGTACCTCT AAACCATT TTT TTAGTGTCCTA GTTTTGTGGT ATTAAGTACA 120
TTCACATTAT TGTGCAACCG TCCCCACCAT CCATTCACAG AACTCTTTCA ACTTGCAAAA 180
CTGAACTGT ATGCATTAAG CAATAACTAT CCCTTCCTTC TTTCCTCTTC CCCAGAGCTC 240

GAG

243

(2) INFORMATION FOR SEQ ID NO:1335:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1335:

```

GAATTCGGCC TTCATGGCCT AATTCTGGGA AACTGAGAG AAAAATCTGA GGCCATCCAG      60
AAGGAACTAG AACAGACCAA GCAAAAAACA ATCAGTGC GG TTGGTGAGCA GTCCTGCC      120
ACAGTCGAGC ACCTCCAGCT GGAGCTGGAT CAGCTAAAGT CAGAGCTGTC CAGCTGGCGA      180
CACGTGAAGA CCGGCTGTGA GACAGTGGAT GCCGTACAAG AAAGAGTGGG CGTGCAAGTC      240
AGAGAAATGG TGAACTCCT GTTTCCGAA ATAGCTCGAG      280

```

(2) INFORMATION FOR SEQ ID NO:1336:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 281 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1336:

```

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCCGAAT TCGGCCTTCA TGGCCTAGAC      60
TAATCTTACT GTAGAAATGA TGTGAGATTC TTGTTTGACT ATTTTAGAGC AGATTCGGTA      120
TCTAATGGGA TTCCATCTTG ATGTACAGAG CACCTTCTAC ATAATGAATT TTGCATTTC      180
GATGGATGAA GCCTTTAACA CAGACAGAAT TTAAAGTATT GCATATTTCT GGAAGAAAAG      240
CATTGATCAC ATCCTCCTTA GATATTTAGT AATACCTCGA G      281

```

(2) INFORMATION FOR SEQ ID NO:1337:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 172 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1337:

```

GAATTCGGCC TTCATGGCCT AATATTTAGG TAAAAAGGTA AACTAGTACA CCTACCAGAA      60
AAGATAAATA TTAATTTATT GCATCTCTGA CATGAGAAAA AAAGCCTTTA TGTTTTACTG      120
TTTTTTTCTA ATTTTCTTT TTCTTTTTTT TTTCACATG AATGTTCTCG AG      172

```

(2) INFORMATION FOR SEQ ID NO:1338:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 235 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1338:

GAATTCGGCC TTCATGGCCT ACTGTATTTT ATAGTGAAGT GTTCATAAAC TAAAGAGTCA	60
TTGATTGGT TTCCTGGCTA ATTAAATCT GAATTCCATT TGAAGTTCCA TTGAAATCAT	120
GGTTTACTC TATAGCAGTG GATGTTTTT CCACACCTTT CTGATATTTT TTTCCTTCCT	180
GAGACAGGT CTGCTCTGT CACCTGGGAT GGAGTGTAGT TGCACCAAAC TCGAG	235

(2) INFORMATION FOR SEQ ID NO:1339:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 148 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1339:

GAATTCGGCC TTCATGGCCT ACTTGTTTTT AAAGGCATAT GTTGTTTTAT TGTGCTTCAC	60
AGGTACTGTA TCTTTTTTTA CAAATCTAAG TTTTGTGGCA ACTCTGTGTC AAGCAAGGCT	120
ATTGGCCCCA TTTTCCCAAC AAGCACGC	148

(2) INFORMATION FOR SEQ ID NO:1340:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1340:

GCCTGTGTGA AGTTTGGACT TTAATCTACC AGATCACTCC TTCACCTCC ATAAAGATGT	60
CTGAACCTGA CACTTCCTCA GGATTTTCGG GAAGTGTGGA GAATGGAAC TTTCTTGAGC	120
TGTTTCCAC ATCCCTGTCC ACGTCAGTGG ACCCATCCTC AGGCCACCTG TCAAACGTCT	180
ACATCTATGT GTCCATATTC CTCAGCCTTT TAGCGTTTCT GCTTCTGCTT TTAATCATTG	240
CCCCCAGAG GCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1341:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 259 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1341:

```

GAATTCGGCC TTCATGGCCT ACTATAAAGT ACTCTCGCTG GTATTGTCAG TATGTGTGTT      60
AACACAATA CTTGGTTGTA TATTGGGTT GAAACCAAGC TGTGCCAAG AAGTTAAAAG      120
TTGCAAAGGT CGCTGTTTCG AGAGAACATT TGGGAAGTGT CGCTGTGATG CTGCCTGTGT      180
TGAGCTTGA AACTGCTGTT TAGATTACCA GGAGACGTGC ATAGAACCAG AACATATATG      240
GACTTGCACC AACTCGAG                                     259

```

(2) INFORMATION FOR SEQ ID NO:1342:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 268 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1342:

```

GAATTCGGCC TTCATGGCCT AGTCCTTGAC TCTGGAGTTT TACAAAGCAG TCACATTTC      60
AATAAAGTC TGGGAAAGCA ACACATCATC GCCCACTTTT AATTTTGCTA AATAAGGATA      120
TTAGAAAAAG AATAGAAAAT TGCAGTCCCT TACTGTTTAA AGAAAAACCA AAAGAAGTTA      180
AAAAAAAAAC AACCTCATTA TGTTGTCTTT GTTTTGTGTT TGTTTCTTT CCTTGAAAT      240
CAGTGAAAGT TTGGTCAGCC ACCTCGAG                                     268

```

(2) INFORMATION FOR SEQ ID NO:1343:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 241 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1343:

```

GAATTCGGCC TTCATGGCCT AGCCATTTAA TATACTAAAA CAGTGTGTA AATTAACTTT      60
GGTACAAATT GCCAGTCATC TCTAGATCAT TTTAAGCATT TTAAGAATAT TTATTATCAA      120
TCTAAGTACA GAAGAATAAC TGCCAGCAGT GATTATTGTC TTGGATTAG AGTTTTTAAA      180
AATCCACCTC ACTGAAATGG TTATGTTTAT CACAGTTTGC AAGGTTTGTC TGTTTCTCGA      240
G                                     241

```

(2) INFORMATION FOR SEQ ID NO:1344:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 313 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1344:

```

GAATTCGGCC TTCATGGCCT ACCCATTCTT TCCTTCCTGC CTGGCCTGGG CCCCTCCTGC      60
ACAGATGGCC TAGGTACCCA GCCTGGAGGC CAAGGCTGGA TTCCCAGAGT CTGCCCTGGT      120
GGAGTGGGAA TAGCAGGTTT TCTGCAACTC AGGGGAGCTG CCCTGCAGGG CTTCACAT      180
GTGCTCAGGC CCCTGTGCCA GGTCTGGTGA TGCTTCCTCC TTGCCTTTCA GGATCTCCTA      240
TTGCACAGCA GACAAGATGC ACGACAAGGT GTTGCATAC ATGCCCCAGA GCCAGACAA      300

```

CCAGAGCCTC GAG

313

(2) INFORMATION FOR SEQ ID NO:1345:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1345:

```

GAATTCGGCC TTCATGGCCT AGGCTTCTCT TCTGAATTGA TTGGTAGTGT TGTTATTTTC      60
TTGTTATTCA GTTTAACAAG TACATAATCA ACATCAGTGC TTGGGAAGTC AGGAGTACGA      120
GAGATAAATA AGAAGTATAT GATCTTTTCT CTTATTTTCT CTCAGTATAA GTTGACCTG      180
TTTTCCCTT CATCTCTTTT TCTTCAAGAA CATAATATCG GCTGAAGTGG AATGAGTATT      240
CAAATTGTCC AAAAAAATAT ACAAGTGAGG GAATTAATAA AATTTTGTGT AATTATAAAT      300
ATGTATATAT TGGGGGGCAG TCTCGAG                                           327

```

(2) INFORMATION FOR SEQ ID NO:1346:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 189 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1346:

```

GAATTCGGCC TCATGGCCTA AATCCTTGGG AATACAATGA GACTCATCAG AAACATTTC      60
ATATTTTGTA GTATAGTTAT GACAGCAGAG GGTGATGCTC CAGAGCTGCC AGAAGAAAGG      120
GAAGTATGA CCAACTGCTC CAACATGTCT CTAAGAAAGG TTCCCGCAGA CTTGACCCCA      180
ACACTCGAG                                           189

```

(2) INFORMATION FOR SEQ ID NO:1347:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1347:

```

GAATTCGGCC TTCATGGCCT AGTGGGCTTC AGGAAAGCAA AATATAAATA TTATGGTTAA      60
AGAATTTTATA ATTAAGATTT CACCCATAAT TCTTAATACT GTGTTGACAA TCATGGCTGC      120
ATTGTCTCCA AAAACAAAAG AAGATGGATC CAAAGATACG TCTAAGGAAA TGGAAAATCT      180
TTGGGGTATC AAATCGATTA ATGATTATAA CACTTGTTTT CTGGGTGTTG ACACGGCAAC      240
AGAAATAACG GAAAAGCTCG AG                                           262

```

(2) INFORMATION FOR SEQ ID NO:1348:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1348:

```
GAATTCGGCC TTCATGGCCT AGTAATGTTA AAACAAACGA AATAAAAATA GAAGGAAAAA    60
CTTTCTGAGT TTCAAAAACA ACAGACTAGT ACTCTAAAGA ACTCTTTAAA ACAATTAAGT    120
GTTAGGATTG CAGTTATGAT TGGATATTAT TTAATTCTGT TTCTGATGTG GGGTTCCTCC    180
ACTGTGTTCT GTGTGCTATT AATATTTACC ATTGCAGAAG CTTCAATTCAG TGTGAAAAAT    240
GAATGCTTAG TGGATCTGTG CCTCTTATGC ATATGTTACA AATTATCTGG AGTTCCTAAT    300
CAATGCAGAG TTCCCTCCCT CTCCGCGCTC GAG                                333
```

(2) INFORMATION FOR SEQ ID NO:1349:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 553 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1349:

```
GAATTCGGCC TTCATGGCCT AGGAAGACAG ATTTACACAGA GAGTGGGTTT CATGTTAAAT    60
GTCTGATTTT CTGTGCGGAT GCGCCACAAA GGACACTAGG TTTGTGGGC CAATGTGTTA    120
TGTGTGTATG TAGGCAAGCA GGAGGGGGTG GGTGGGCTTC TTTTTTTTC TATTTTTTC    180
TTTTCTTTT TGGTTGTGGA AGAACCACGT TAACCCCTCT AATTCTTTA AAAAGACATA    240
AGGTTTGAAA AGGAGATTTT AGGAAGAAGC AAAAGAAAAA AAATGGGATA CATATATTGC    300
ATCTGTAATC CAATCAAGCT GTCCTGAAG ACAAACTTGA TCTCTGTTCT CACCAGTTGA    360
CACACTCATC AGGCTATAGG TCAACTCTAA GTGTGGTGAC AGGTGATGGA CTCTATGCCA    420
ATTCTGATAC TGAATTTTCT TTGCTTATT GAAGCTTCAT TTTGTGTGTT TTAATTATGA    480
AAGTATAGTA ACACCTACCA TGCATACCAA AGCAATATCA ATATTTTCAA ATGCATCTTC    540
CCCCATTCTC GAG                                553
```

(2) INFORMATION FOR SEQ ID NO:1350:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 246 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1350:

```
GAATTCGGCC TTCATGGCCT AGGTTTTTGT TGTGTGTTT TAAAGGAGTT AGACATAGCC    60
TAACAACTG GAAATTGACA TTTCCATCTA TTTTCTCCC TTTTGAAGCT AAATATGTCT    120
TTGTATTTT GGTTCCTAGT CCCCATTACT ACTTATTTT TGATAGTTCA TCCACAGCAA    180
CTTCAGTCAG TTAGCTCACT AGTCTTATG GCTAGAGATT CCGCCAGTTT TCCCCTAAAA    240
CTCGAG                                246
```

(2) INFORMATION FOR SEQ ID NO:1351:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 231 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1351:

```

AAAGAAAAA TAAAAAATAA AAAAAAATAA GGAAGTGTA TGTGAGACAC ACAAGAAAAG      60
CAAATCAGTG TTGTAAGCTT AAAGTACAAT TTCAAAGGTC ATTACCAACA GCAGGGTTTT      120
TTTTATACTT TAAAAACATT ATGCTACATA TCATTGCCAT TTTCATATTT TGGGGTTTTG      180
CTACTCTTAT ACAATGGAAT CAATGGAAAT GTCATCCAGC CAGATCTCGA G              231
  
```

(2) INFORMATION FOR SEQ ID NO:1352:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 260 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1352:

```

TGAATTCTAG ACCTGCCTCG AGTTGCTCCC AGGAATAGTC CAAAGGAGCT GCTCTTGCCC      60
CTTTATACAC AAGCGCCAGC AACCAAAACC CTCCTCCTG GCAATAAGGC CTCACTATAG      120
TTGCCCTCAT GCTTCCTAAG CTCTCTCTTG CTCTAATAAC TCTAATTCTG GGCCAAGCCC      180
AAGAGTGCCA TTCTTTCTTC CTAGCTGGGG ATGGAAAGCT GAGAGGGGCA CAAGGAGGGG      240
AAAAGTATCA CCCTATCGAG              260
  
```

(2) INFORMATION FOR SEQ ID NO:1353:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 482 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1353:

```

GAATTCGCCT TCATGGCCTA CTTTCAAGT GAATGATTG GTGTTTGAAC CTTCTTGATT      60
ACCTTAAGAG GGAAAAATGA AGGAGAGGAG GGAACCATCA TCACATACCT TTACAGTTGT      120
GGAATGTTAG CCCACTATAG TGTTTAACTA AGGAAAATCT AATATAATAC ACTCCCAAGT      180
GATCTGAAAT GATCCGCTAT TCAGAATTCC AGAGAAAGAC ATATCCCTGC CAGAAGGGTG      240
TCCTTCATAA CCAAATTTGG TCTTCAGTCT GGTGCGTGCA TACTCAAACA GGAATCACTT      300
CCCTTAAGGA ACCTAAGGTA TGCAGTTGAG ATCAACTTAT TCCTTTTTGA TTGTGCCCTT      360
TAAAGCATCA ATCAGACGTG AATGCATCTT GTGACTTGGA GTTACTAGTA ATATTGAAAT      420
CTGAAACTTG GGGGATCTTT GAAGACACAT GGGATTAAAA GCTGCATAAT ATACATCTCG      480
AG              482
  
```

(2) INFORMATION FOR SEQ ID NO:1354:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 339 base pairs

(B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1354:

GAATTCGGCC TTCATGGCCT AATACCCAAA ATTGGCATGA CTAATTATAA AATAGTGCCT	60
CCCAAATCCT TGGAAATATC GAAAGACTGG CAATCAGAAA CCATAGAGTA TAAAGATGAT	120
CAGGACATGC ATGCTTTAGG GAAAAAGCAC ACTCATGAGA ATGTGAAAGA AACTGCCATC	180
CAACACAGAAG ATTCTGCTAT TTCTGAAAGC CCAGAAGAGC CACTGCCAAA CCTTAAACCG	240
AAGCCTAACC TGAGAACAGA GCATCAAGTG CCCAGTTCTG TGAGCTCACC TGATGATGCC	300
ATGGTTAGTC CTCTGAAACC TGCTCCCAA AATCTCGAG	339

(2) INFORMATION FOR SEQ ID NO:1355:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 203 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1355:

GAATTCGGCC TTCATGGCCT ACTTTTAGAT GCTTTACATG CATAAATCA AATAATACAT	60
TAATAACCTT CCATACATCT TTCTTTGTGT ACACGTTACT ATTTCTGTAA GATAGATTTT	120
TAAAAGTGGA ATTTCTAGGC CAAATGATTT ACACCTTTTT TGTGTTGTTG TTTTTTGT	180
TTTTTGAGAC GGAGTGTCTC GAG	203

(2) INFORMATION FOR SEQ ID NO:1356:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 516 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1356:

GAATTCGGCC TTCATGGCCT AGGAGAATCA GGCAGGGAGG TTGCAGTGAG CCGAGATGGC	60
AGCAGTACAG TCTAGCTTCG GCTCGGCATC AGAGGGAGAC CGTGGAAAGA GAGGGAGAGG	120
GAGACCGTGG GGAGAAGGAG AANGAGGGGG AGGGGAGGG GGGGAGAGGG AGAGGGACAA	180
TGATGCTCTG CTGTAGGTAT TCTTCCCAT TTGAATTTT TCCTCAGCAT TATTTTTTTT	240
AACATCATTC AGTCTCCTCT TATACTACAC TTGGATTGAA TTTAATATCT CATGAAGAAA	300
AAACATTTCT ACTTTGAAGC ATGTGAATTA GCATGTTTTT ATAACAGCTT TATTGAGATA	360
TAATTTACAT ATATAAATA ACCGTTTAAA GTGTATAAAT CAGTGGTTTT TAATGAGATA	420
TAATTTACAT ATATAAATA ACCATTTAAA GTGTATAAAT CAGTGGTTTT TAAATATTC	480
ACAATGTTGT ACGACCGTCT TCTCAGTCAA CTCGAG	516

(2) INFORMATION FOR SEQ ID NO:1357:

(i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 405 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1357:

```
GAATTACTAA TCAAGAAAAA ACAAATCAC AAATCACTAC CAAAGCAGTT CATTGTCAAT    60
AATTTTTTTC CCTTGATATT TGTTTACTT TTTGCGAACC CTGAGCATAC ATCCAAGTTG    120
CCCTAAATAT ACGCACACCT GAGGTGTCT TTATAGGAGC TTTATGGTTG CAAGTTTTGT    180
GTATAATCTT TAATCATTTT GAGTTGATTA TTGTGTATCT AGTACCATAA GAGTCCTGTA    240
TTATTCTTTT GCATATGGAT ATCTAGTTT GGAAATCTTC CCCGTTGTGT CATTTTGGTG    300
GTGTTTGAA AAATGTGTTT ATTCCATATA AATTTTGTT TATTATCGAG CACATTCATT    360
TTGCTCACTG GTCTGTGTTT CTCTGTGTAC GCCAGTAACC TCGAG                      405
```

(2) INFORMATION FOR SEQ ID NO:1358:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 328 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1358:

```
CTCGAGTCTG GCTTTGTTTC AAAATGATTA AGATTAAATG ATGAAATAAT ATTTTATAGC    60
CACTGCATTG GATACTTGA TGTTTTCA AGCATCTTCT TATGACTAAA TCTTCTGTTT    120
CATTCTGTTT TAAATCTAAA AAGTAAATG ATGGTCACTT GGAATCTGCT CTATATTTTA    180
ATTATAGTCT CTTCTGTTT TAAACAATAA CTTACACATA TTTTTCATAG TTTTAAGTAA    240
AGATTAAATA ATGCCATCTT AGAAAGGATC TGTTTAACCT ATATTATAAA AGTTAGATAC    300
ACAATTTTAG GCCATGAAGG CCGAATTC                      328
```

(2) INFORMATION FOR SEQ ID NO:1359:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1359:

```
CTCGATGGCC TAAGGCAGTC TCCTGGAAGC ATGACATTGA TGCCCTGGGC TCACCTCTTT    60
GTTTTGTTT CCTTCCACTT TAGCGGGAAC CACATCTTCA AGGGCCGTGC TGCCGGCATA    120
GCAGTGAATG AGAACGGCAA AGGCCTCATC ACAGGTACGG ATGGGAAC TGCGGCACCT    180
GGCAGCCAGG CCAAGGTCCC CTGGCGTCAC CCCCAGCTT CAGGACCTCT AGGCCATGAA    240
GGCCGAATTC                      250
```

(2) INFORMATION FOR SEQ ID NO:1360:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 206 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1360:

```
GAATTCGGCC TTCATGGCCT ACGATTCTAT TTCCTTATCT GCTTGCAGAG CTATTTAAGA    60
ATCAATGTCT TATTTTCCT GAGTCCTTTA TAACCCTATT CATAATTTCA ATTGCTGATG    120
CCTCTTTGAG CTACGAGTTC TACTTTGTGC ATAACGTTGA GGAATTTCTA CGTTTACTGT    180
TTCTCCTTAC TTCACTCATC CTCGAG                                         206
```

(2) INFORMATION FOR SEQ ID NO:1361:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 377 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1361:

```
GAATTCGGCC TTCATGGCCT AAGAAATCAA CGTTGAACCC TAATGCTAAG GAGTTCAATC    60
CTACAAAGCC TCTGCTGTCT GTGGTGAGCT GGGACAGGAG AATGTGGACT TTGGTTTCTG    120
TGGGGAGACT TGGGCAGTGC TTATAGATGA ATAGGGGGAG GAACACTTCA CTTCAGGAC    180
CACTTGCTTG GCAGGCAGTG TGAGGAGATG TCATAAAAAT GTAAGGATGG CACCTTTGGG    240
GCTGGCTTGG GGAAAATGGA CTCAGGTCTC TAGGTTTGGG TGATCAGGGA TCCAGTGAG    300
TCTGATGAGG GGTTAACAGG CTTTCTTTG GTTCTTGCA TTTGGCTGAG GGAGTATTGG    360
AGTGGGGATA GCTCGAG                                         377
```

(2) INFORMATION FOR SEQ ID NO:1362:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 264 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1362:

```
GAATTCGGCC TTCATGGCCT AGTTAAAGGC AAGTATGTCA TATTACTGAG GCTACAAGTT    60
AGTCAGCAGA TGAGTGCCAG TCCAGCCTTT TCTGGTATGT TATTGTTAGA AATATTGAGT    120
TCTAATGTTA CATCTGAGGA AGTATGTAAT TTGAGAATTG TAACTTCTAA GGGATTCACT    180
GCATCATAGC TATGCCTGTA TGGAGTCTAA CATATGACCA ATACCAACCC ATAATCCAGC    240
ATTGAATTCT AGACCTGCCT CGAG                                         264
```

(2) INFORMATION FOR SEQ ID NO:1363:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 333 base pairs

(B) TYPE: nucleic acid

(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1363:

```

GAATTCGGCC TTCATGGCCT ACCCCTCCCC TAGTTCAGT CCAGGTAAAC AAAAATTGAT      60
TCTATTTTTC CAAAACACCA GCCCCTTCAG ATGGCCTGGT TAATCTTCAT TAACATGTTA      120
TCTTCATTAA CATGTTTATC TTCATTAACA TATTCTCAG TGATAAGAAG GGCCCGGGT      180
TCAACATCCC ACTTTGCATC CATGCAGACA AGGGCTGTGG GAAGCTGTAA AACTGAAGAG      240
GCGGTGAATC CAGGAGGGAT TCCCAGATA TCCGTGAGTT GGTGTTTGAC TTTCTTGAAC      300
ACGTCTTTCC TTTACTTTAC ACTTCCACTC GAG                                     333

```

(2) INFORMATION FOR SEQ ID NO:1364:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 358 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1364:

```

CTCGAGGGGT CATGTTGTG GGGAGAAAGA GACCACATCA CACACAGAGA GAACAAGTCT      60
GTATTAGTTG CTTTGTCTAC ATAACAAACC ACTCCAAAT TTAGTGGTTT AGAACATCA      120
CCTATTTAGT TAATGATTCT CTGGGTGCA ACTTGGTCTG GGATCAGCTG GGCACTTCTT      180
TTGCTGGTCT CAGCTGGGTT CAGCTGCCTA TCAGCTAGGG AGCTCTGTTT CAGAGGTTGG      240
TTGGCTATGG GTGGCAGGGA TCAAGGATGA CGGAGCCATG TGTCTCTTTT CCCTTTATTA      300
CCCAGCAGGT TAGCCAGAT CTTTTCCTTT TCTTCTCTAG GCCATGAAGG CCGAATTC      358

```

(2) INFORMATION FOR SEQ ID NO:1365:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 292 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1365:

```

GAATTCGGCC TTCATGGCCT ACTTGTTTCAG GGTATGGGSC TAGGATGAGA GAGAATNCCA      60
CAGAGTATGA AGGAAGAGTG ATAGATCCAG ATGAGATACA GCTCAGAGTG CCACGCCCCC      120
AGAAAGAGGA ATCAGGCAAG TACTGTCCCA AGGCAGCTGG AGGGTGAGGG CTGAGTGCCC      180
TGGCTTCCTC ACTTGGGGAG ACCATGGGTC TCTGTAGAAA TTCCAATATA AAGGCAGGGA      240
AATTTGACTG CATGGAGTCT TCAGGTAGAA ATGTTTCTCT TGCCTAAATT CA              292

```

(2) INFORMATION FOR SEQ ID NO:1366:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1366:

```

GAATTGAGCA AGATACCTGG GTCATGATCT CTGAACAGGG TGAGAACTT TATAAAATGA      60
TGTGCAGACA AGGAAATCTG ATCAAGACA GAAAAAGAAA ACTGACTACG TTCCCTAAAT      120
GCTTTCTTGG AAGCGAATTT GTGTCATGGC TGTGGAAAT TGGAGAGATT CACAGGCCTG      180

```

```

AGGAAGGCGT GCACTTGGGA CAAGCATTAT TAGAAAATGG AATCATTAC CATGTTACTG      240
ATAAACATCA ATTCAAACCA GAACAGATGT TATATAGATT TCGCTATGAT GATGGAACAT      300
TTTATCCAAG AAATGAGATG CAGGACGTC TCGAG                                335

```

(2) INFORMATION FOR SEQ ID NO:1367:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 383 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1367:

```

GAATTCGGCC TTCATGGCCT ACTTCTCTG TTGCCTTGA CCTTCTTTT TCATGTTAAA      60
GCCTTTCCTC AAATGTCTGA TTACCCTTGG CTGCCCGTCA TTAAAGAAAG CGCCACTAGT      120
CAGCTCATCG GAAGCTGTGA GGGAGAGGGC TGCATTGGT CCTGCCAGGT GGAGGAACAC      180
TCAGGCATCA GTACTAGGAG GTCTTTCCTC TCAGCCCATG GGATTTCCTT AGAGTCCTAC      240
ACGGCTGGGA TGAGGCACCT GGTGCTGAG TAGAGGAAGG GAGTCATGGG TCAGTCACCC      300
TGTATGCAGA TTTTCACACA ACCCCCTCTC TCCAGGACAC GCCTCGCCCC CCACCCTAAG      360
TAATGCAGAA CCCAAATCTC GAG                                383

```

(2) INFORMATION FOR SEQ ID NO:1368:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 347 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1368:

```

GAATTCCTAT GTGACTGCGA TGGATCTCTT TGTTCCTGTT TGTTCATTT TTGTTTTTGC      60
AGCCTTGATG GAATATGGAA CCTTGCATTA TTTTACCAGC AACCAAAAAG GAAAGACTGC      120
TACTAAAGAC AGAAAGCTAA AAAATAAAGC CTCGATGACT CCTGGTCTCC ATCCTGGATC      180
CACTCTGATT CCAATGAATA ATATTTCTGT GCCGCAAGAA GATGATTATG GGTATCAGTG      240
TTTGGAGGGC AAAGATTGTG CCAGCTTCTT CTGTTGCTTT GAAGACTGCA GAACAGGATC      300
TTGGAGGGAA GGAAGGATAC ACATACGCAT TGCCAAACTG ACTCGAG                                347

```

(2) INFORMATION FOR SEQ ID NO:1369:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 243 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1369:

```

GAATTCGGCC TTCATGGCCT ACCATTTTCT ATGAGCAGAG GAGAGTCACA GGGCATCATG      60
TGTTAGGAGA AAGAGGCTGG ACTTATCTT GTCAGTAATG CTGGATGATA CAATAAGGGT      120
AGGGCCTCAA AAAGTAAATG TAAAAATGAT ATTTGGCACA CATTGGGGTG AATAGAGGCT      180
GGAGAAAGGG AACCAAGTCA CTATGTATTG GAATAATTCA AGTATAGGCC TGGGATACTC      240

```

GAG

243

(2) INFORMATION FOR SEQ ID NO:1370:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1370:

GAATTCGGCC TTCATGGCCT AGAGGATTAC TTATTTCTCA GCATTCATCT GGTAAC TTAA	60
GCAGCATGAA GCAAGAGTTG CACTTTAAAA AATGACAAGA AAATAGCTAT TCATT TAGTC	120
GACAGAGTAA GGCCCATCTC ATTTCCAGGA TCACTAGTTT CTGCTTATGA CGGGGTGAGC	180
ATCCGCCAGC GCGGTGATTG GGAGGCGCCC CTGTGTCTTT AGGCTGAGGC AGTGCCCAT	240
GCTGCAGTGC CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:1371:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1371:

GAATTCGGCC TTCATGGCCT AGTGTAGCAA GCTTCCCCTT TGGGAGGGAT GTGAGAACAG	60
AAGACTGAGG ATTGTCTCTA ACTCTAGGAT TCTTTGATGA TTGATTGGAT TGGGGTTTGT	120
TGTTGTGTCT AATATTACGG ATGCTAAAAAT GCCTGTACTT CCAAGGTGAT AGCCACCAAT	180
AACCATACAC GTACTAGTCA TCCTAGAAGT GTTTTATTTT CTCTGTGTGG TTATCTTCCC	240
TACCCCTAGG GTTGGTGTCT GTTTCCTGCT ACTTCAGGTT GGTTCCTCCAC TGGGAGGCTT	300
CTGCTGACAG AAAGCCCCAT GCTTTGCTCG AG	332

(2) INFORMATION FOR SEQ ID NO:1372:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1372:

CTCGAGGGCA ACTGCAGAAG AAAAGATCAG TGAATCTGAT GACATAGCAG AAGAACTAT	60
CTAAAGCGAA GAAGACAGGA AAAAAAGCCC CAATGTGAAA TGAACAGATC ACCAGTGAGC	120
TGTGGAACAA CCTATATGGG TTATAGGAGA CCCTAAATGA GAGAACAAGG GACTAAAAGA	180
AGGATTTAAA GAAATAATAG TACAATTTTC TCCAAGTTTC ATGAAAACCG ATTGAATTCT	240
AGACCTGCCT CGAGGCAGGT CTAGAATTCA ATCGC	275

(2) INFORMATION FOR SEQ ID NO:1373:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 350 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1373:

GAATTCGGCC	TTTCATGGCCT	ACAAGACCAT	CCTGGCCAAC	ATGGTGAAAC	CCTGTCTCTA	60
CTAAAAAATA	CAAAAAAATT	AGCCAGGCAT	GGCAGCGTGT	GCCTGTAGTC	CCAGCTACTC	120
AGAAGGCTGA	GGCAGGAGAC	TTGCTTGAAC	CCAGGAGGCA	GAGGCTGCAG	TGAGCCGAGA	180
TCGCGCCATT	GCACTCCAGC	CCGGGCGACT	GAAGAGACTC	CATCTCAAAA	AAAAAAAAAA	240
AAAAAGATGA	GCCTTTTCTG	GGAAAGTGGG	AAAGACAGAG	AAGCCTCCTG	ACAGCCAAGG	300
AGACCAGCAG	CCAGTAGAGC	AGGTGTTGTA	ACAAGGCCGA	GGCCCTCGAG		350

(2) INFORMATION FOR SEQ ID NO:1374:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 273 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1374:

GGAAAAATCA	AGGAGACATA	TTACCACCAA	AAGAACAATA	ATTTCCTAGA	AGCTGCAAAT	60
AAATAGAGAC	TATACACTGC	CTTACAGATA	ATTTAAAGTA	ATTGTTTTAA	GGAATCTCAG	120
TGAACITCAA	GAAAATACAG	AGAATCAGTT	CTATGAAATC	AGGGAACAA	TAAATCAACA	180
AAACGATAAA	TTTAACAGGT	TGAAATCACT	AAAAGAACCA	AACAAATTTT	GGGGCTAAAG	240
AATACAAATGA	ATGAAATGAA	AAATACTCTC	GAG			273

(2) INFORMATION FOR SEQ ID NO:1375:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 332 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1375:

TGTGGACTAA	AAAAGATGCT	GGGAAAAAAG	TTGTTCCATG	TAGACATGAC	TGGCATCAGA	60
CTGGAGGTGA	AGTTACCATT	TCAGTATATG	CTAAAAACTC	ACTTCCAGAA	CTTAGCCGAG	120
TAGAAGCAAA	TAGCACATTG	TTAAATGTGC	ATATTGTATT	TGAAGGAGAG	AAGGAATTTG	180
ATCAAAATGT	GAAATTATGG	GGTGTGATTG	ATGTAAGCG	AAGTTATGTA	ACTATGACTG	240
CAACAAAGAT	TGAAATCACT	ATGAGAAAAAG	CTGAACCGAT	GCAGTGGGCA	AGCCTTGAAC	300
TGCCTGCAGC	TAAAAGCAG	GAAAAACTCG	AG			332

(2) INFORMATION FOR SEQ ID NO:1376:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 349 base pairs
 (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1376:

GAATTCGGCC	TTCATGGCCT	AGGCTTCAGC	AGCTTCCTAC	GATCAGCCGA	AGAAAGCAGA	60
AGCTCTGGAG	GCTGCCATCG	AGAACCTCAA	TGAAGCCAAG	AACTATTTTG	CAAAGGTTGA	120
CTGCAAGAG	CGCATCAGGG	ACGTCGTTTA	CTTCCAGGCC	AGACTCTACC	ATACCCCTGGG	180
GAAGACCCAG	GAGAGGAACC	GGTGTGCGAT	GCTCTCCSG	CAGCTGCATC	AGGAGCTGCC	240
CTCTCATGGG	GTACCCTTGA	TAAACCATCT	CTAGAGAGGA	CATCCCTGCT	GGGCTGTGTT	300
GCAGAGTATA	AGATTTTGA	CTTGTTTCATG	TCCCTCTCA	CCCCTCGAG		349

(2) INFORMATION FOR SEQ ID NO:1377:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1377:

GAATTCGGCC	TTCATGGCCT	AAATATGTTG	AAATAGGTTA	GAAAAGGAGG	TGAATATTAT	60
GGGCTGTTGT	CATTGTAAA	TTCTGCAGTA	ACTTCAGCGT	TGAGGGTTTT	TTTTGTTTTT	120
GTTTTGTTT	TGAGTTTTC	TTACTGAAAT	CAAAGAGTTG	TTACTCTGTC	TGTGGGTGTT	180
TAAGAGACAG	GATCTCACTC	TGCTGCCAG	GCTGGAGTGC	AGTGCAGCCA	CGAATGCCTG	240
GGCTCCAGGC	CCTCCTGAGT	AGCTAGGACT	TACAGGCATG	CACCACCACA	CCGATTTTTT	300
TATTTTTTTA	TTTTATTTT	TTTAGTTTT	TAGAGGTGGT	GGGGGGGTCT	CACGTGTCT	360
GCTTCTGGGC	TCAAATGATC	CTCCTGCCTC	AACCTCCCAA	AGTTCTAGAA	TTACAGAGGT	420
GAGTCACCAC	ACTCGAG					437

(2) INFORMATION FOR SEQ ID NO:1378:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 267 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1378:

GAATTAAAGC	ACTGCCTCTA	TTCAGGCTGC	CGAGGCACTG	CTTTAATTTT	TTGAAAGATT	60
CACCGCGTCT	TCTTGGATT	CAAGAAAAAT	CCCGTTAAGA	ATTGAGGGGC	TCTCTCTTC	120
CCCTCCTGAC	GTGAGTGTA	CTCACTTCCT	GGTATGTCTC	CTTTCCTTTT	GGCCTACATC	180
CTTTGTCTGT	TAGGTGCTTC	CACATCCTTA	TGTCTTAAAT	GGCCAAAATA	CGTCACCCCC	240
ACTGCCAAAA	CAACAGATC	ACTCGAG				267

(2) INFORMATION FOR SEQ ID NO:1379:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 305 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1379:

GAATTCGGCC	TTCATGGCCT	AGAGGTGACT	AGAAGCGAAG	ATGGAGGTGG	CGCAGCACCT	60
CATCCCAACT	CATGCCACCT	GGGGAAGCAG	CTTCAGGCCT	TTCTGTTGTA	ACCTCAGCAG	120
AAACTTTGGG	GTTCATCCTT	TATCTTGCAC	ATGCCCCAGG	GAGGTAAAGG	GACTTGCCTA	180
GGTTCATGTA	CAAACCTTCT	GCTTCCAGAG	CAGGACTTTA	TTGGGACACC	ATAAGGTGA	240
GGCTGGGAGG	TACCCAAGAA	TTCTGGGGA	TGGTATGTCA	TTGACTGTGG	GTAAGAGGGC	300
TCGAG						305

(2) INFORMATION FOR SEQ ID NO:1380:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 206 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1380:

GAATTCGGCC	TTCATGGCCT	AGGCTTGGTT	GCCTCTGAAA	GGAGGGAAAG	TCTCTTGGTA	60
AATTATCTCT	TTTGTGCTGT	TTGCTGTTTC	TCTGCTACCG	TCTTTGCAGT	TCTCCTCTCA	120
CTGGTTGCAG	GCTTTCATAG	TAAGGTTTGG	CGAGAAATGT	TCCAAACATC	ACATTTTGGG	180
TTCTAGGCTG	TCACCCCAAG	CTCGAG				206

(2) INFORMATION FOR SEQ ID NO:1381:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 496 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1381:

GAATTCGGCC	TTCATGGCCT	ACTCCTCGAT	GCTGATTCAT	ATCCTACTGC	CCATGGTTTT	60
CTGCGTCTTG	CTCATCATGG	TCATGTGCTA	CTTGAAAAGT	CAGTGGATCA	AGGAGACCTG	120
TTATCCTGAC	ATCCCTGACC	CTTACAAGAG	CAGCATCCTG	TCATTAATAA	AATTCAGGA	180
GAACCCTCAC	CTAATAATAA	TGAATGTCAG	TGACTGTATC	CCAGATGCTA	TTGAAGTTGT	240
AAGCAAGCCA	GAAGGGACAA	AGATACAGTT	CCTAGGCACT	AGGAAGTCAC	TCACAGAAAC	300
CGAGTTGACT	AAGCCTAACT	ACCTTTATCT	CCTTCCAACA	GAAAAGAATC	ACTCTGGCCC	360
TGGCCCCTGC	ATCTGTTTGG	AGAACTTGAC	CTATAACCAG	GCAGCTTCTG	ACTCTGGCTC	420
TTGTGGCCAT	GTTCCAGTAT	CCCCAAAGC	CCCAAGTATG	CTGGGACTAA	TGACCTCACC	480
TGAAAATGTA	CTCGAG					496

(2) INFORMATION FOR SEQ ID NO:1382:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 280 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1382:

```

GAAACTAGAC AAGAAATCTC AAGCCATGGA GGAGCTAAAA GCAGAGCGAG AAAAACGAAA      60
GAACAGAACA GCTGAGCTCC TTGCCAAAAA ACAGCCATTA AAAACCAGTG AGGTCTACTC      120
TGATGATGAA GAGGAGGAAG AGGATGACAA ATCCAGTGAA AAGTCAGACC GCTCATCAGC      180
AACATCATCG TCTGATGAAG AAGAGGAGAA AGAAGAGATC CCTCCCAAAT CCCAACCAGT      240
TTCCTTACCT GAAGAATTGA ATCGGGTTCG ATCTCTCGAG                        280

```

(2) INFORMATION FOR SEQ ID NO:1383:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 262 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1383:

```

GAATTCTAGA CTGCGCTCAG TCTCCCGTC ATGCTCCCTC TGCCCGGCC TCAAAAAAAA      60
AAAAAAAAAA AAAAAAACA ACAGCACCTG TCCAGGCTTC CTTAGGTACA TCTTCTTTGT      120
ATCCATTGGG AGGCTCTGAG ACTGGCCCCA CTGGTCCTA AGAATCCCAA GGTCTTTGGG      180
AGCGTCCAGC ATGTTAATTA GCGTATCATT ACATACTGCT ATCCCTTTCC ATTTCTTTTT      240
GTTCCATCAC TCTCCTCTCG AG                        262

```

(2) INFORMATION FOR SEQ ID NO:1384:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 458 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1384:

```

GAATTCGGCC TTCATGGCCT ACAGATTATC TTACACTGAA CTGATCAAGT ACTTTGAAAA      60
TGACTTCGAA ATTTATCTTG GTGTCCTTCA TACTTGCTGC ACTGAGTCTT TCAACCACCT      120
TTTCTCTCCA ACCAGACCAG CAAAAGGTTT TACTAGTTTC TTTTGATGGA TTCCGTTGGG      180
ATTACTTATA TAAAGTTCCA ACGCCCCATT TTCATTATAT TATGAAATAT GGTGTTCCAG      240
TGAAGCAAGT TACTAATGTT TTTATTACAA AAACCTACCC TAACCATTAT ACTTTGGTAA      300
CTGGCCTCTT TGCAGAGAAT CATGGGATTG TTGCAAATGA TATGTTTGAT CCTATTCGGA      360
ACAAATCTTT CTCCTTGGAT CACATGAATA TTTATGATTC CAAGTTTGG GAAGAAGCGA      420
CACCAATATG GATCACAAAC CAGATGGCAG GACTCGAG                        458

```

(2) INFORMATION FOR SEQ ID NO:1385:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 284 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1385:

```

GAATTCGGCC TTCATGGCCT AAGTTTTCAT AATCTTTCTA AGCAAATAAA TTGAGCATGC      60
AGGTITTTTTT TGCITTCAGT AAGTATGTTA AAGATATTTA TTGTACTTTG STTTTCTTTT      120
CTTTTTTTTTT TTTTTTTTTT TTTGAGACTG AGTCTCTGTC ACCCAGGGTG SAGGGCAGTG      180
GCCC AACCTC AGCTCACTGC AACCTCCGCC TCCCATGTTC CAGTGATTCT CCTGCCTCAG      240
TCTCCCGAGT AGCTGGGATT ACAGGTGTGA GCCACCACGC CCAG                          284

```

(2) INFORMATION FOR SEQ ID NO:1386:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1386:

```

GAATTCGGCC TTCATGGCCT AGTAGTTGTT CCATGCTGTT GTTTTTTGTT TTATCTTTCA      60
TTGCCTTTCC CTCTGCAGTC AACATTATGA CCTGGGGACT CCAGCATCCT TCAAGCAAGC      120
CATTTCGGAA GAAGGTGAAA AGAAGCCAGG ATGATTGGCA CCTCCTCCTC CTCCTCCTCT      180
TCTTCCTCTT CCCTTGCCCA GCCCCTCCT GTGCGTGTGT TTCAGACAAC ACAGGAGCCA      240
GCACAGGAGT GGAAATCCT GTAGCGCAAC TCGAG                          275

```

(2) INFORMATION FOR SEQ ID NO:1387:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 296 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1387:

```

GAATTCGGCT TCATGGCCTA ATTGAATTCT AGACCTGCCT CGAGCCTCCA AAAAGAGTAA      60
ATAAATAAAA ATAAATTCG CTTTAAACAG AAACACACAT AAAACAAAGT TATATATTGA      120
ACCTAACCCT GTATTTCCTC TGGGAACAGT GGTTCAGTAT TCAATAATTC AGGATTGCA      180
GCAGCATAGA ACTTAATGTA ATGAGAGTCA AGTATATATT TCCCAGAACC CTAAACTAC      240
TGCATATGTG AACATATCTT ATTCATTGAT TATGTGGGCA TATAGTGAAA CTCGAG      296

```

(2) INFORMATION FOR SEQ ID NO:1388:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 548 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1388:

```

GAATTCGGCC TTCATGGCCT ACAACTTGTG CTAGCTTGTG ATCCCTCAAA GTTGGGTCAT      60
ACGTTAGTGC TAGATACTAG AAATTTTCAC TTTTCCACTG ATCAGAGAGA CAGACATTAA      120

```

```

AAACAAAAAT AGAAGAAAGG AAAGCTTTCA CCTGCGAGCT TCTTAGCAGG GAACAATTGT 180
CTTGCCAAAA CTTTTTCCC TTTCTCTCC CATTTTCTT TACCCAATCC CTTCTTACTC 240
CTTGCCAGTG TGACCATGCG CATTTGGTTA AAAAGATATT CTTTCTAAT CAGGGCAAGA 300
CAGGCAAGAA TTTTAAAAA GGAAGGGAGG GAGGGAAGAA GGAAGGAAA ATAAATCCTT 360
TATTTTTTTA AACCTATTTG AAACCTCTTA AGAAAATTCC ACAATAATCA GGATTCTGT 420
AAATATGTGC AATATATATG AACATATTTG AAAAATAACA GTTACAGTAT ATTTACATT 480
TTGGAAACTT TTCTTCAGGG CCAAGTAACA TGTGTATCT TCCTTTTTGC TTGTGGGGGC 540
TACTCGAG 548

```

(2) INFORMATION FOR SEQ ID NO:1389:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 305 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1389:

```

GAATTCGGCC TTCATGGCCT AATATGTTCT TCACAGGGAT GAGTCCTAAA TATTTATCTT 60
CAGCCATGAC ATTTTCTTG AATTCAGAT TTGCATATCC AACTGCCAAC TTGATATCTC 120
ACTTGAAGA ACATCATCAC AAACCTAACT CATCTGAAGT TGGCTTCACA TTCTCTCCC 180
CTATCACTAA CTGCCTTTCC CACAGTATTC CCCATTTCGG TACATGGTAC CACCATTAT 240
CCAGTTGTTT AGACCTAAAC CTTCTAATT ATTCTTTTTC CTATCGTTAT CCCACATACC 300
TCGAG 305

```

(2) INFORMATION FOR SEQ ID NO:1390:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 292 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1390:

```

GAATTCGGCC TTCATGGCCT ACTGGGTTAT TATCTATTC CGTTGATCTA GCTAGTTTTC 60
AATTTCTAC CTTTCTACC TGTTTTGTT TAATAGTTTA CTGTTTTTAT CTGAACAAAA 120
TTCTCTTTC AATAGTTGAT CCTGCTGAAT GTCTTCCCGT AGCATTGGGC TTCCTCAGGT 180
AACCIGGCAT TTTGGTTTGA ATAGAAGGT TTTTATTGTC CTTTTTTTCT TTTTATTAT 240
TGAGATATTT ATCTTTCTT TATTATTTA TTCGAGTCGG AGTCTACTCG AG 292

```

(2) INFORMATION FOR SEQ ID NO:1391:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 217 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1391:

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GAATTCGGCC TTCATGGCCT AGGCGATCGT ATTAATTCTC AAGAAATTTC CAACAAATAC 60

```

CACCTGGTTA ATGTTTTCAT TAAGGGCACA CATTCTTGCT ATTGAGCCAA TGTGTGTGGT 120
 GATGGTGATC AAAGTCGCTC TGGCCAGGTC CTCTTTACTG ACAGCCTCTC GCTTCTCCTT 180
 GCTCATCATG TTCCAAAGC TTGAAGCCAC ACTCGAG 217

(2) INFORMATION FOR SEQ ID NO:1392:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 438 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1392:

CGGGAGGCTG AGGCAGGAGA ATCACTTGAA CCCGGGGGGT GGAGATTGCA GTGAGCCGAG 60
 ATCAAGACAT TGCATTCCAG CCTGGGCAAG AAGAGGGAAG TTCTGTCTCT AAGAAAAAAA 120
 AAAAAAAAAA AAAGCTACAC TTGATCTTT GATTCAGTAG ATATCAGTAA GTATTGCTG 180
 CATTTTCATGA GAGCCAACCA TGAGTAAGAC AGAAGTACTT CCTGTCCTCC TGGGCTTTCC 240
 TGAGTAGCAG GAGAGATGGA CTAGGAAGAT GAGTGACTGC AGTAGCCTGT GCTGTTCTGC 300
 GGTGATGGGA GAGGCCACTG AGAGTCCGGA CAGGCAGGCT GATATTGTGA GAAGGCTTCT 360
 GGAAAGAAGG AACATTTAAG CTGAGAGTGA GAGTTGCGTA AGAATTCCC AGGGAGGGGA 420
 AAGAGGGAAA CACTCGAG 438

(2) INFORMATION FOR SEQ ID NO:1393:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1393:

GAATTCGGCC TTCATGGCCT AAAACTTCCT AGGAGAAGGC AAGAGAAAGC CACCAGACCA 60
 GAGCCGAGGA CTAAACTTTA AGGTCGAAGA CGGCAGAGGG GCAGGTTCTC CCCTGCACAC 120
 CCCAAGGCCT CTCCTGCACC CGCGAGGCCT TCCTTGAGCG CCCAGGCCCC CGAAATGCCT 180
 GCCCTCCTTC TGACAAAAGG AGGGGGTAGG ATGTGAAGGG GTAGTGCAAC CAACAATGTT 240
 TTTGTAACA CAACAACAAG GAAATACTCG AG 272

(2) INFORMATION FOR SEQ ID NO:1394:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 311 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1394:

GTGAAATTGT CAAATAAAAA TATGAAACT CAGCTGACAA GAGTAAATGT CCTTAAAGAC 60
 AAAACAATTG AAGAGCTCAG GCAATCTTTA GCAATGTTG AAAGGATGAA AGAGAAGGCA 120
 AATGTTGAAA CGATGAAAGA GAAGGCAGTT GTGAAAACAG AAAACTTGAA AACTACATTA 180
 GACTCTGCAG AGCAAAAGGC AAGATCAGAC AAAGAGAAGA CCCAGCAGAT GTTAGATGCT 240

GTCACCTTCTG AGCCCCCAAC AGCAAAGAGC GCACCTGAAG AAGTATCAGG ACAAGAACAA 300
GAAGTACTCG A 311

(2) INFORMATION FOR SEQ ID NO:1395:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 367 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1395:

GAATTCGGCC TTCATGGCCT ACTGTGTGCT TAGTTTTAAA GACAACTTTG AAGTAAACAA 60
 TGAATAAAAA GATGTCACCT AACCTCTGA GGCTCCTGAG CACATTTTGC TGATACAGTC 120
 TGTGGGGCTT GAGGAGACCG CATGTATTGT TCTTCTTTT GTTTTCTTC TGAGTTCTCA 180
 ACTGCGGAGA GCACCTGAAC CCCCTTTCCT TTTTGACCGC AGGCTGCACT TTGGGCCCCA 240
 GCCAGCCCTT TTTCTTTTTC TTTTCTTTT GTGGTTCTTC CCTGGAGCGA CTCTGGGGAG 300
 TCCTGGATAT CCCGCTGCC CCTTCCCTC AGCCCCATGC TTGTTCCAAC AGTCTCCACA 360
 GCTCGAG 367

(2) INFORMATION FOR SEQ ID NO:1396:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 333 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1396:

GAATTCGGCC TTCATGGCCT ACTTGGAAC GAAAGAGGGC CCAACCTACA ACTAAGAAGG 60
 GACAAACCTT GAACTAAGTA AGACCTTACA CACCCAGAAA GAACACTGGG CCCTCCTTCT 120
 TCAGGGACAA TGCAGTAGCC ACTTGGCTTG TGAATTTAC TGAAGGCTAT TTCTGTAACT 180
 TTGCTAGTTA ACTTAGTTTT GTATTTCAGG CAGAGGTGCG CTCTGTAATG TTGGGCCTTT 240
 GACTTCACAG TACTGGAGAG CTGTTACAC AGATGTTTAG ACCTTCTCT CTCTCTCTCT 300
 TTTCTTCTTT CTCAACAACT CTTATCTCTC GAG 333

(2) INFORMATION FOR SEQ ID NO:1397:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 356 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1397:

GAATTCGGCC TTCATGGCCT ATAGGCCATG AAGGCGAGAT ACAGCAGCTG CTGCAGAACG 60
 TCAAGTCTGA GTTGGAGATG GCCCAGGAAG ACCTGTCCAT GACCCAGAAG GATAAATTTA 120
 TGCTCCAGGC AAAAGTGTCTG GAGCTGAAGA ACAACATGAA GACCTGTCTC CAGCAGAACC 180
 AGCAGCTCAA GCTGGACCTA CGCCGCGGCG CGGCCAAGAC GAGAAAGGAG CCGAAAGGCG 240
 AGGCCAGCTC TTCCAACCTT GCCACGCCCA TCAAGATCCC GGAATGCCCA GTTCCCGCCT 300

CGCTGCTGGA GGAGCTGCTG AGACCACCGC CCGCCGTGAG CAAGAGCCCC CTCGAG 356

(2) INFORMATION FOR SEQ ID NO:1398:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 447 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1398:

GAATTCGGCC TTCATGGCCT AATTCTATGA GGTATTATTA TCACTATTTT ACAGATGAGT 60
 AAATAAGGC TCACAGAGAT TAACTGGCAG AACTGAAATT CTCCATATCT TTTTGATTCC 120
 AGATTTATTG TCTTAATCAT GATATGATT TGTCTCATAT AATCCAATAC AATAAATAAG 180
 GAGGTCAGGC AGTAGGAGGT GAAGTTGGAG AGACTGGGAG ACCTATCAGG AGGGGTCATT 240
 TATGCCTGGC TAGGAGTTTG GACTTTATGC TGAGGCTATG GGAGCACTAT TAAAGTGATT 300
 CTAGCACTGC AAAGTTATGA TTAGGTTTAT CAGCCAAAGG AAAAAAAG ATCTTGGTGG 360
 TCACAGTGCA GGTAGATACG ACATAATCGA GAAATGTGAA GAATGCAGAA TCAAGAGTTT 420
 GGTGCTGGAC AGAGAGAGGA ACTCGAG 447

(2) INFORMATION FOR SEQ ID NO:1399:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 428 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1399:

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACTCTTT TAAATTTTCT GCATTTGCCT 60
 GAAAAGCACC CCGTAAGAA TAGATTCTC ATGGCTCTAA AAATTATTCC CAAGAATACC 120
 TTAATTGGTT CAAAAGCAGA CTGTTTCTCT TCATTTTCATC TCAAATCAGA CTTCTGGGCA 180
 AGATGTTCTT TAGAGTAAGC AAACCTACAA CCTAAAAATC TCTTCAAGAG GCATCTCTGG 240
 TCTTGTGACA AGACCTCTTC AAAAACCAC AGTAAACTC CCTCCCTCC AGTTGGCCAC 300
 CAGTCTGCCA CCAAACATGA ACAAATCTG CTGCTAATCG GTTCCCTTG TGATCTGGTT 360
 CCTGAGGTCT TCGGATCTGT GCAATGAATT ATTTATTGTT TTATTAAACC GACAGTGGTG 420
 TGCTCGAG 428

(2) INFORMATION FOR SEQ ID NO:1400:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1400:

GAATTCGGCC TTCATGGCCT ACTAGACCTG CCTCAGGGTG TTCTGTGGTT TCAGGTGGAA 60
 GGTGGAGGGC CTCGGAGACC AACTGTGAGT TAGCGGGGT TTAGAATCTG ATGGGAAGAG 120
 GGCAGAGACA ACAGGTTCTG AAGAGTCAGG GCTCCTGGGA CCTGGGAAGT AAAGAGTAAA 180

CCTGGGGCAG TGGGTCAGGC CAGTAGTTAC ACTCTTAGGT CACTGTAGTC TGTGTAACCT 240
TCACTGCATC CTGCCCCAT TCAGCCCGGC CTCGAG 276

(2) INFORMATION FOR SEQ ID NO:1401:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 316 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1401:

GAATTCGGCC TTCATGGCCT AGCCACCGTG CCTGACCTAC TTATTCTTTT TCCTGTTTCA 60
CATCTAGTGT ATGATACGAT TGGCTTATTT GTTTATGTTT CATCATCTGT TCCCCACCCCT 120
CAGCCCTGGC CCCCTTGCTG GAACGCAAGC TCCAGGCAAA GCTATTTCAC CGTTGCTGTT 180
TTCCAAGGGC CTCGAACAGT GCCCGGCACA TAGCAAATCC TCAGTGAACA TTAGAGGAAT 240
AAGTGATTCA AGAATAGAGC TGTTAGAAGG TGTTCGGAG GAAGACGCAT CCGGCTTCAT 300
CCCTGGCACC ATCGAG 316

(2) INFORMATION FOR SEQ ID NO:1402:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 342 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1402:

GAATTCGGCC TTCATGGCCT AAATTCTCCA GCAAATGAG GATGAAAACC AGGAAAGAAG 60
AAGAAATGGG ATCCATAAAA CAGTGGACCT TACTTAGGAT GTCTCATTCT AGAGTGACAG 120
CCAAAAGGGT ATCTCACCTT AGAGTGACAG CTATCCAGCA GACTAATTTC AGATGAGAGC 180
ATACTGTCTC GGGCTTTCTG GGAAGAATGT GCATTCAGTG CCATAGATAG TATCACTGAA 240
GAGCTGGGAT GCTTGAGAAG ATTATTTAGT CAAGAAAAAA GAAAGACAAA TCAACAATAT 300
GTCAAAAAAT TCAGGTCCAA TTATAGAGCA AAAGGGCTCG AG 342

(2) INFORMATION FOR SEQ ID NO:1403:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 333 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1403:

GAATTCGGCC TTCATGGCCT AAGGCTAAAA AGAAGGAAAA AGAAAAGGAA AAAAAGGAGG 60
AGGAGAAAAT GGAAGTGGAT GAGGCAGAGA AAAAGGAGGA AAAAGAGAAG AAAAAGAAGC 120
CTGAGCCAAA CTTCCAGTTA TTGGATAACC CAGCCCGAGT TATGCCTGCC CAGCTTAAGG 180
TCCTAACCAT GCCGGAGACC TGTAGATACC AGCCTTTCAA ACCACTCTCT ATTGGAGGCA 240
TCATCATTTT GAAGGATACC AGTGAAGACA TTGAGGAGCT GGTGGAACCT GTGGCAGCAC 300
ATGGCCCAAA AATCGAGGGG GAGGTAAGTC GAG 333

(2) INFORMATION FOR SEQ ID NO:1404:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 422 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1404:

```

GGGCCCTGGG CCCAGCCCC CAGCCCATCC GTGGCCCAGG CACTGGGGGG CTGAGGTCCT      60
CTGAGAAGGG ACACAGGGCC GGGGGGCTCT CTCAGCCCAT CAGCAGGAGA GGACTGACTC      120
CAGAAAAATC AGCGTTTGTA CCCACTCAGG CTGCCAAGAC CTGTGTCCGT CCTTCCAAGC      180
TCAACCTTCA GAGTTCATGA GGGCCCTTGC CCAGAATGTC CACAGAGTTC ATGAGGCCCC      240
TTGCCCGGAA TGTCCACATT TGAACCTCC CAACACCGAG CCCCATTTCA AGTATAACCA      300
GGAGGGAAAA TGGTGCTTGA AATAAGCATG CCACAAAGGA AAACCTGCTT TCTCGAAATG      360
GGCCCTGGCC GCCCAGGCC TGACCTCCC GGCCAGGATG GAACGTTCCA GAAACCTCG      420
AG

```

(2) INFORMATION FOR SEQ ID NO:1405:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 314 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1405:

```

GAATTCGGCC TTCATGGCCT ACTGGGTCC AACTGGGATA TCTTGGTGGA GAACATGGGG      60
AGGCTCAGCT TTGGGTCTAA CAGCAGTGAC TTCAAGGGCC TGGTGAAGCC ACCAATTCTG      120
GGGCAAACAA TCCTTACCA GTGGATGATG TTCCCTCTGA AAATTGATAA CCTTGTGAAG      180
TGGTGGTTTC CCCTCCAGT GCCAAAATGG CCATATCCTC AAGCTCCTTC TGGCCCCACA      240
TTCTACTCCA AACATTTC AATTTAGGC TCAGTTGGGG ACACATTCT ATATCTACCT      300
GATGGACACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1406:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 299 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1406:

```

GAATTCGGCC TTCATGGCCT AATTGAATTC TAGACCTGCC TCGACTGCC CAAACCTGAC      60
CCATCCTCAG ACCCCACCC CCGTCACCGC TCCTCCCAAT GATTCCTCCC TCTGTCTAGT      120
CTGCTCTACT TTCCAAATCC TCGCTGCTC CAAACCTGAC CCATCCTCAG ACCCCACCC      180
CCGTACCGC TCCTCCCAAT GATTCTCTCT TCTTTGATCC TGCCAACTTT TCCCCAACAG      240
CACCGTAATC CTCCCCAAA TCATCACAAT CCTCCACCAT ACAATCCCGC GTTCTCGAG      299

```

(2) INFORMATION FOR SEQ ID NO:1407:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 199 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1407:

```
GAATTCCTAGA CCTGCCTCTC GCTGGAAATC AGCGTTGTAA GATGGACGCC CTGCTCAGCA    60
GAGCTCATCT TTCTAGAAAG GCACCTGGCC TTGAAGGCG AGTGAGGAAC TGTCATAAGG    120
ACTTTTCTT CCCATGTTGC TTTTCAGGAA AGCTTTCAGG ATGTGGAAT GATGGTTCAG    180
CTATTGGATG AGGCTCGAG                                         199
```

(2) INFORMATION FOR SEQ ID NO:1408:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 220 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1408:

```
GAATTCGGCC TTCATGGCCT AGTGATCCAG AAGAATTACC ATTAAGTTTA TTTTCAGAATT    60
TAGACTTCCA AATCAGGTTA ATCCTCCAAT TAAAAGAAAG ATTCAGAGTG AATTTTAA    120
AAGGCAAGGC AGTTATATGT TGCTTACAAG AACTAAACA TAAAGGCACA GATAAGTTGG    180
AAGTAAGAGG GAAAAGACA TGCGAATACT AAGTATAGAG                                         220
```

(2) INFORMATION FOR SEQ ID NO:1409:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 235 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1409:

```
GAATTCGGCC TTCATGGCCT AGATAAGCCC TTCAGAAACA CATGCACTGT TAATTCGTGT    60
TTAAATATAA TAAAACCAT TCACTTTGA CATTACCTAT TAAGTTTAC TGAAAGTCAA    120
AAGGCCTACT TACTGTGACT TCCAAAAAG TATTTTGATA ATATTTTGAA AGAAATAAAT    180
AATTCCCTT TGCATGAAAT TAAAAGCCAT GATAATAGGG AAACATTAC TCGAG          235
```

(2) INFORMATION FOR SEQ ID NO:1410:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 577 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1410:

GAAATCGGCC	TTCATGGCCT	ACCCACGTAA	CGGCTTGGCT	GGGCACCCCC	GCTTGGCTTG	60
GTGGTCCTGG	TTTGATTGG	CTTTACCCTG	GCATTCCCTT	GCTGGGCTTG	ACCTTTTCTT	120
GCTGGGCTTG	GCATTCCCTT	GGCTGGGCTG	GGTGTTCCTC	CGGTGGGGCG	TGCACTTTCC	180
CTGGGTGGTG	GAGGGGGCGT	GGGCTCTCCC	CGGGTGGTGG	GGGGACGTGG	GATCTCCCCA	240
GTTGGTGGTG	GGGGAGGGGT	CGTGGGCTCT	CCCAGGGTGG	GGTTTTGGCT	GGGATTGACC	300
TTTCTCCCTT	AACAGATTGG	AAACTCGTAA	TTTCCCGCTT	TTTGGTGAAA	CTCGTTGACA	360
GACACCATCT	GCTCGCTACT	ACCAGGCTGT	TGAAAGCAGA	TGGTGGCTGA	GGTTTCTCCA	420
AAGCTGGCTG	CCTCCCTTAT	GAAGAAGCCC	TTTGGCTTCA	GGGGCAAGAT	GGGCAAGTGG	480
TGCTGCTGCT	GCTTCCCTG	CTGCAGGGGA	AGCGGCAAGA	ACAACATGGG	TGCTTGAGAG	540
GACCACGACG	ACAGCGCCTT	CACGGAGCCC	ACTCGAG			577

(2) INFORMATION FOR SEQ ID NO:1411:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 275 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1411:

GAATTCGGCC	TTCATGGCCT	AGGGATGCCT	CTCAGTGACC	CTTATATGTC	AGGTATGAGG	60
CGGATGGGGC	ATCTCTCTAG	TCCTTTCTAG	GGTTTTTACT	CTTCTAGTCC	CTTCAAGGGC	120
TGAGTGCTCT	GACTTTATGT	CTTCCACGT	AGGCGTTGAC	CCTGCACTAT	CAGATCCTGT	180
GTTGGCCCGG	CGCCTTCGGG	AAAACCGGAG	TTTGGCCATG	AGTCGGCTGG	ATGAGGTCAT	240
CTCCAAATAT	GCAATGTTGC	AAGACAAACC	TCGAG			275

(2) INFORMATION FOR SEQ ID NO:1412:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 532 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1412:

GAATTCGGCC	TTCATGGCCT	AGTTTTATTT	TGCACTTGGA	AATATGTCAG	AAATCACTTG	60
AAGGCAAATA	AGATCTGGCC	CTCTGCAGAG	TTAAGTGGCT	AACATGCCCT	AGATCTCCAG	120
GCTTAGAGGC	TGCCCCTTTG	GTACCCATGA	TTCTCCAGGC	CTTCCAGGG	CAACATTGTC	180
CAGCATCTCT	CTCTCTCCTC	CCGCCGTCTT	CCTTTGGAAG	TTTGACTCTC	ATGTGTGGTG	240
CCCCATCCCT	AGGCCACCTG	TGCCGGCCAG	CCCCTGAACA	GATAAATCCT	ACTAAAGGTT	300
AATCCCAAGC	ACAAGCTTTG	GGCTGGTCCT	TCTGGGTGTA	TTGGCTTTCT	CTCTCTCTCT	360
CCTTTTTTGA	GATGGAGTCT	CCTTCTGTCT	CCCAGGCTGG	AGTGCACTGG	CACAATCTCG	420
ACAATCTTGG	CTCACTGCAA	CCTCTGCCTC	CCGGGTTCAA	GCAATTCCTC	TGCCTCAGCC	480
TCCTGAGTAG	CTGGGATTAC	AGGTGCCCGC	CAGTGTCTCT	GGCATACTCG	AG	532

(2) INFORMATION FOR SEQ ID NO:1413:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 321 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double

(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1413:

GAATTCGGCC	TTCATGGCCT	AGGCATCCAG	GACAAAAGTT	TGGAAAACAA	AATAATGGAA	60
CTAAATAGTA	CTAACCAAAG	TATAGGGTGC	TTTATGATTT	ACAGAACTCT	CTTACAGGCA	120
GTATGTTGTT	CAGGCGCCAC	TAGAACCAC	GTAATGGCAG	AGGCTTCCTG	TTCCATGTTT	180
AAAAACCTTT	CCAAGGCTTT	TCATTATTTT	CTTATCTGTG	GTACCCCTAG	CTTCCTGTGC	240
TCTAGACACA	CTGGCCTACC	TTCAACTTCC	TTGACCAGTG	TAGCTTACAG	TGTAAGCTTA	300
CCCCCGCCC	CCACCCTCGA	G				321

(2) INFORMATION FOR SEQ ID NO:1414:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 457 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1414:

GAATTCGGCC	TTCATGGCCT	ACATGAACGG	AAGAGTGGAT	TATTTGGTCA	CTGAGGAAGA	60
GATCAATCTT	ACCAGAGGGC	CCTCAGGGCT	GGGCTTCAAC	ATCGTCGGTG	GGACAGATCA	120
GCAGTATGTC	TCCAACGACA	GTGGCATCTA	CGTCAGCCGC	ATCAAAGAAA	ATGGGGCTGC	180
GGCCCTGGAT	GGGCGGCTCC	AGGAGGGTGA	TAAGATCCTT	TCGGTAAATG	GCCAAGACCT	240
AAAGAACCTG	CTGCACCAGG	ATGCTGTAGA	CCTCTTTCGT	AATGCAGGCT	ATGCTGTGTC	300
TCTGAGAGTG	CAGCACAGGT	TACAGGTGCA	GAATGGACCT	ATAGGACATC	GAGGTGAAGG	360
GGACCCAAGT	GGTATTCCCA	TATTTATGGT	GCTGGTGCCA	GTGTTTGCCC	TCACCATGGT	420
AGCAGCCTGG	GCTTTCATGA	GACACCGGCA	ACTCGAG			457

(2) INFORMATION FOR SEQ ID NO:1415:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 373 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1415:

GAATTCGGCC	TTCATGGCCT	AAAAATATCT	AGTCACTGTI	CTGTTTACC	CATTCTTTTA	60
AACTTTGTTT	TTCAGTTTCA	GTCAGGCTTC	CAAGAAACT	GATAACATTT	TCATTGGTTG	120
GTTTCTCTTA	TATCTTTTTC	ATTTCACAGT	ACATTGTGAT	TTAATGATTT	ATCTCTTAAA	180
TCTTTTTCAG	TTCATAGGTT	CCTCCTGTCT	CTTCTTTT	CCTTGCACTT	CATTGTGTC	240
AGAACCTTTG	TCCTGTGGTT	TCGCACAGTC	TGGAGGAATT	GGGGAAGTG	GCTGTCTAAA	300
CTGGTTCCCT	CCTTCCCAT	ACTGCTGCAA	TCAAGATGTT	AGGGGGCCTA	CAAGCAATAG	360
AAGCATCCTC	GAG					373

(2) INFORMATION FOR SEQ ID NO:1416:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 239 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1416:

GAATTGGCCT TCATGGCCTA GTCATTGCT TTTATATCAG ATATCTAATT AATCAAACCTT	60
TCTGGTTAAG TGCCTCCAAT TATTAACAAT CCTGCTCAGA GTTAAGATTA GCATCCAAGG	120
ATTTTCTCC ATATTCTTT TCAGAGGCAA TGAATTAC TAGTTTTTTA GCTCTTCAAC	180
TTTGGCTGAT GGTTTTAGTG GTGGTTATGC TATCTTCAGT AGTTGGGGA TCGCTCGAG	239

(2) INFORMATION FOR SEQ ID NO:1417:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 308 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1417:

GAATTCGGCC TTCATGGCCT AAGAAAGTT AAGTTACTTG CCTGAGGTAA CTTAGCATTG	60
ATAGAATTAG GATTTGAACC TGGGTAGTAT GACTCTTAGG TCCCATGAG CTGGCACACA	120
GGTTGCCAAT CCATCAGTTA ACCTTCCCAT CACTGGGTCA GAGAGCCAAG GAGCAGAAGG	180
GGGATAGAAC TTCCCCAGTA CCAAATAAG GGGCTGAGCT GGGATCGCAA CCACAGGTTC	240
TGTTCCAAAG CTGGGGCTCT TTCGACAAGG CCATGCCCGC CTTGTCTCTT ATGCATGCTC	300
CACTCGAG	308

(2) INFORMATION FOR SEQ ID NO:1418:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 174 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1418:

GAATTCGGCC TTCATGGCCT AAACAAACAA AAAAAATGT TTTATATGCA AAAGTTTTTT	60
GTATCATGCT TGTATAAATC CAGCTTTTTT TGTATCATGC TTGTATTTTT TTTTCTAGC	120
TGTTATTGCT TTTCTGATAA TAGTACTGAA TTTGGTGTTA TGGCTGGTCT CGAG	174

(2) INFORMATION FOR SEQ ID NO:1419:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 234 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1419:

GAATTCGGCC TTCATGGCCT AATTTTATAT TATTGTAA CACTGGGCTG GAATTATTGT 60
 TTTGGGAAAA GGCCCATGAG AGTTTTGCT CTGTGGGTTT TTAAAGGTAA GAATAAATT 120
 CGTGTGAG ATGTTTTGA TGTGCCTGTA ACCAGAATAG AAGTGTCTTA GATTATAACT 180
 TTCTCTCAGA TTGAGTAATT CTGTTGTAAT AAGTCAGCAT ATGTTGCCAT CGAG 234

(2) INFORMATION FOR SEQ ID NO:1420:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 157 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1420:

GAAAAATATTT TTACTTTTAT AATTGATAGT ATTTCTTAAC TCTCAATTAA AAAAAGTTTT 60
 TAAGCATTTC TGTGATATAG ATACTATCAT TTCATATTAC ACAATGCTTC TGATGATTTT 120
 GCTGTTGTTG TTAGGGACTA CTCGAGGCAG GTCTAGA 157

(2) INFORMATION FOR SEQ ID NO:1421:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 495 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1421:

GAATTCGGCC TTCATGGCCT ACCAGGATGA GAGGGGAAAA AGAAAGCCTC CAGTGACTTC 60
 AGTTGCTTTG CCAGTTGTCT TGGGATTGTT TTACACCATC CTTTACTTCC CTGCTCAGA 120
 CCTCTCTGTT TCACCATGTC TCAGGCATTC AGGAAAGTAT CTGCTCACTC CCATTGGTG 180
 AGTCCTCGGC CTTGAGGTTG CTGACTCTCA GCGGTTAGGC AGCTGGATGA CTTCCCGCTT 240
 CATGCAGCAA AGGCCAGGGG CTTGCGCGCC TCTGCAGAGT TGTGCTAGG GAGACTTGTG 300
 TCATCATCCA CAACCTTGTT TCTCACTTCC TGGTTGGGCT CATCTCTGAA GAACAGGTCT 360
 CCCAGCTTCG CTCCTTATCA CTGCATTGTG AAGAGGAGGA AAAGTGAATC ACGGAGAGAG 420
 AAAGGAAAGG ATAGAATCAC AGGCTGCATC TGCACCTGAA AAGTGACCCG CGGAAACTCT 480
 ATGGCGGATC TCGAG 495

(2) INFORMATION FOR SEQ ID NO:1422:

- (i) SEQUENCE CHARACTERISTICS:
 (A) LENGTH: 449 base pairs
 (B) TYPE: nucleic acid
 (C) STRANDEDNESS: double
 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1422:

GAATTCGGCC TTCATGGCCT AGACAAAAGT AGAATTAGTA AACTACTACA TTGAGTACAC 60
 TTTGTGTAA AATTCATAGG GAAGACTTCT TAAAAACAAG TGAAATTGTT AAACCCCCC 120
 CTAAGCATTA CAGATGGCTT ATAGCTGTCC ACGGGGTTGG TAGAGGTGGG AAAGGGAAGG 180
 GTTCTAGGCC AGAATGTTCC TATTAGAAG ACACCTCAAAT TACAGTCTGT GTTATGTATG 240

TATACCATTT ATTCAATGCT ACTGTGTATA TAATGGAAAA CTTAAGTCCA GTTTGAAACA 300
 TCTAGTCTTT CTAGGTGTTT AAAAGTGAC AACAGCCTGT CGCAGTGGCG CATGCCTGTG 360
 GTCCCAGCAC TTTGGGAGGC CGAGGCAGGC GGATCACGAG GTCGGGAGAT CGGGACCATC 420
 TTGGCCAGCA TGGTGAACC CCTCTCGAG 449

(2) INFORMATION FOR SEQ ID NO:1423:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 306 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1423:

GGGAGTTTAT TATTCATTAA CGAAATTAGC CCTTTTATCT GCCATATAAT TTGCAACAAT 60
 TTTATATCAG CTTTTTTATT GTCTTTTGGC TGTGTTATG AAAGTTATGG CCATGCAGAA 120
 ATGTGGGATT TTATGTAGCA CAGTTGCTC TTTTTTTTTT TTTTGAGACG GAGCCTAGCT 180
 CTGTCAACCA GGCTGGAGNG CAGTGGCATG ATCTCGGCTC ACNGCAACCT GTGCCTCCCA 240
 GGTTCAGCA ATTCTTCAGT CTCAGCCTCC CAAGTAGCTG GGACTIONAGG CGCCCCACCC 300
 CTCGAG 306

(2) INFORMATION FOR SEQ ID NO:1424:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 362 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1424:

GAATTCGGCC TTCATGGCCT AGAACTTTGT ACACCATGGA ATGTTCTACT TATTATTTTG 60
 TGCTACAATA TGTGCTGTTT CTTTGTTTG AATTGCAGAT TGTCTACTAT GAAGCAGGGA 120
 TTATTCTATG CTGTGCTCTG GGGCTGCTGT TTATTATTCT GATGCCTCTG GTGGGGTATT 180
 TCTTTTGTAT GTGTCGTTGC TGTAACAAAT GTGGTGGAGA AATGCACCAG CGACAGAAGG 240
 AAAATGGGCC CTTCTGAGG AAATGCTTTG CAATCTCCCT GTTGGTGATT TGTATAATAA 300
 TAAGCATTGG CATCTTCTAT GGTTTTGTGG CAAATCACCA GGTAGAACC CGGATCCTCG 360
 AG 362

(2) INFORMATION FOR SEQ ID NO:1425:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1425:

GAATTCGGCC TTCATGGCCT AGTATATCTG AAAAGTACAC TGTGTTTGA AATTATAAAT 60
 TTTCATTCTG AATGAGGTTT CTTTTTTTGA TTTCTTTAA AAAAAAAAAA CAACCTGCTT 120
 TGATTGCTT TACATTCCTT GCCCTCCATT TTTCTTATTA TATTGTAAAC ATTAGAAAAA 180

TGAACACCCT CGAG

194

(2) INFORMATION FOR SEQ ID NO:1426:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 393 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1426:

GAATTCGGCC TTCATGGCCT AGCCATGTAT TTTCTAATAT CCCTGGACT TCATCTTTGA	60
CTCATGTTTT ATTTTGAAGT ATTGGGATTG TTTTTCAGTT ATCTTCTGT TATATTCT	120
ATTTAATTCT GTTATGGTCA TACAACATAA TTAAATTCT TCTAAATTG TTGAGGATTG	180
TTTTGTGTC CCAGAATATG ATGAATCTCT CATTGAATGT TGTATGTGCA GTTGAAAAGA	240
ATGTTTATTC TGCTGTTGGT GGGTAAAGTG TCATGAATAT AATTAGGAGA AATTAATGAT	300
AGTGTTAAGG TTTTCTATAT CCTTGCTTT TTGGTGTA CTATTATTG ATTATTGAGA	360
GAGAAGGGTT GAATTATCTA GGTGCACTC GAG	393

(2) INFORMATION FOR SEQ ID NO:1427:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 119 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1427:

GCGATTGAAT TCTAGACCTG CCTCGAGCCA CCCCCTTAAT GTGTGTGTG ACAGTGAAGT	60
CCTTGGGTGG GGCCATGTGT GTGTTGTGA TGTCCTTAA GTTGATGCAG CTTCTCGAG	119

(2) INFORMATION FOR SEQ ID NO:1428:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 327 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1428:

GAAAAAGCAG TAAAAATAGA AATCCATCTT CACCAAGCCT TAAAGCAAT ATAAATTAT	60
ACTGAGGTTC CTGCATACTA TAACACACAG AAGGAATTCC TAAAAATGTT CTTTATCCAG	120
CTGTCTACCC AAAGTTCTAT CATCTGGCA AACTGCTCTC TCCAAAATTC ATCATCTTG	180
ACTCTCTCTG AAATCCAAC CCTTCTCTCT TATACCTGT TCTCCAACAT TCGAATTTGT	240
TTAGTTTGTG TTCTTCTTAA TATAGCTATT TCTGTTTACC ATTTTGAGCT CTGGAACCT	300
AACCACTACT TACCACCAA ACTCGAG	327

(2) INFORMATION FOR SEQ ID NO:1429:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1429:

```
GAATTCGGCC TTCATGGCCT AATCACATAT ACACAATTTA CCCATTTCAA GTGTACACGT      60
AGTGGTTTTA GTATATTTAC AGATAGGTGC AACTATCACC ACAGTCAAAT TTAGAACCTT      120
TTCATCAACC CCAAAGAAA CACCATACCC TTAGGTATC GCCTCCCCTA TACTCCACCT      180
TCCAACTGCT GAGCCCTAAG TTACCACTAA CCTTCCTATC TCTATAGATT TCCTTATTCT      240
GAACTTTTGA ATGGAATTAC AGTATCTGGT CTTTGTGCC TGTTCCTTTT TGACTAATGT      300
TTCAAGGTTT ATCCAGGCCC TCGAG                                     325
```

(2) INFORMATION FOR SEQ ID NO:1430:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 226 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1430:

```
GAATTCGGCC TTCATGGCCT ACCTAAACCT GGCAGAGTAC ATCATGCCTC CGAGAAGAAA      60
CGTCATTCCA CTCCTTTGCC GAGCACTGCT GTACCAAGCC ATACACCTGG CAGCAGCCAG      120
CAGTCCCCGC TCAACAGTCC TCACCGGGG CCCATCCGGA CAGGCTGCCC TCCTGGGCAC      180
CAGCAGGAAT TTGCCGGAGC AGCCAACAGC ACCTCCAACC CTCGAG                                     226
```

(2) INFORMATION FOR SEQ ID NO:1431:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 256 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1431:

```
GAATTCGGTT CATGGCCTAG GATTACAAC TTGGAAGAGG CCTATGATAC TCCTGGTAAA      60
CCTCTTTGTG CTGCTCTCTG TGGTTTGTGT CCTCTTAAAT CTAGCTGGAT TTATCCTAGG      120
CTGCCAAGGG GCCCAGTTTG TGTCCAGCGT GCCCAGGTGT GATCTGGTGG ACTTAGGTGA      180
AGGCAAGATT TGCTTCTGTT GTGAAGAATT TCAACCAGCC AAGTGCACAG ACAAGAAAAA      240
TGCTTGAAA CTCGAG                                     256
```

(2) INFORMATION FOR SEQ ID NO:1432:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 240 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1432:

GAATTCGGCC TTCATGGCCT AGGTTGCGGT GAGTCGAGGT CTGCACTCCA GTCTAGGTGA	60
CAGAGCCAGA CCTGGTCTTT AAAAAAAAAA AAAAAAAAAA AGTGAATTCA AAAGATTAGC	120
TAAGACAAAT TGGGAAAAA AACCAAAAGG GGAGTTGACC TAACAGATAT TAAGATGTAT	180
TTCTAAAGCC ATAGCAGCTA AAATAGTACA GTATTAATGT AGGGACAAAC AGAACTCGAG	240

(2) INFORMATION FOR SEQ ID NO:1433:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 229 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1433:

TCATTCTGAA CAAAAGGGAT TAGAGAAGAA AAATCTCTTG ATATAAGGCT TGAAAGCAAG	60
GGCAGGCAAT CTTGGTTGTG AATATTTTCT GATTTTCCA GAAATCAAGC AGAAGATTGA	120
GCTGCTGATG TCAGTAACT CTGAGAAGTC GTCCTCTTCA GAAAGGCCGG AGCCTCAACA	180
GAAAGCTCCT TTAGTTCCTC CTCCTCCACC GCCACCACCA CTCCTCGAG	229

(2) INFORMATION FOR SEQ ID NO:1434:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 268 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1434:

GAAATTGAAA CTCAAATCAG TTAGCTTCAA ACAAAAACGA AAGTTAGACC AAGGGAACGT	60
ATTAGATATG GAAGTAAAGA AAAAGAAACA TGATAAACAA GAACAGAAAG GAAGTGTTGG	120
AGCTACATTC AAATTAGGTG ACTCTTTGTC AAACCCAAAC GAAAGAGCCA TTGTTAAAGA	180
AAAGATGGTA TCAAATACTA AGTCTGTAGA CACGAAAGCG AGTTCATCTA AATTTAGTAG	240
AATTCTAACT CCTAAGGAGC ATCTCGAG	268

(2) INFORMATION FOR SEQ ID NO:1435:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 247 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1435:

GAATTCGGCC TTCATGGCCT ACAAGACTGT CTCAAAAAGA AAAGAAACAC AAATATTTGA	60
ACTCCAAATA TTCTTTGTGT GTAGAAAAAT CTAATGGATA ATTAAACTA GAGCAGAGAG	120

AAAAGCCTAG GAGTTGAGAG ATTTTATAGAT ACGTGACTGA AAAGATTGGA AAAGGCTATC 180
 AGTTTAAATG CTTGTGTCTG TCTTTGTGTG GGCCATGGTA TTTTGGAAGA GCACCATGGA 240
 GCTCGAG 247

(2) INFORMATION FOR SEQ ID NO:1436:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 258 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1436:

GAATTCGGCC TTCATGGCCT ACCTATTGT GCATCAAGTG GTTATCTAAA TAGTTTGAAA 60
 GGATTGATAT ACTACATTAT ACGTCAAAA TAAATAAATA AAATTAAGAA GACAGGGATT 120
 CCAAGATTGT AGCTGACCAA GCTGTCTTGT TTGCGTACA TCAACACTAT GCTGCTTCCA 180
 ATATTCCTAG CCATTCCACA GGTAATGATT TTCAACAAT CAAGAGAAAG TCATTCTTGT 240
 ACTGTAACAT CTCTCGAG 258

(2) INFORMATION FOR SEQ ID NO:1437:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 415 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1437:

GAATTCGGCC TTCATGGCCT AAATCACTTG GATTGGTTCT CTAATTAAAA CACAAGCTAG 60
 CTACCCAGTC TTGATTTTGT TATTTTAAAG AATTGTATAA AAATAAATTT TGTTTTGTAT 120
 TTGTGTAAAG CATAGTCATA ATTCTAAATC AAACACACTG CATCGAGTTT ATCACTGAAA 180
 TTCAGCATCT GCTTTTGTCC TCACTTTGTT ATCTTCTGCT CTCATCGATT ACAGGCGTGA 240
 GCCACGCGC CCGGCGGTAT GTTCCTTACC CTTAAGGACA AGAAATACCG TTTGAAAACA 300
 TTCTTCTTGA ACATTAAACA ACTTAGAATG GTACATTCAT TTAAGAATTA AAATAGGCAC 360
 AAGAGGATTG AATTTTGGA ATATGTTGCT TAGAAATTTG GGGGCAATTC TCGAG 415

(2) INFORMATION FOR SEQ ID NO:1438:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1438:

GCGATTGAAT TCTAGACCTG CCTCGAAGTG CCAGCAGCAG AGGAGATGAC AGTGACATAT 60
 ACAACAGAGG CTGGGGTGGG CACTCCAGGA GCCCTGGAGC GGAAGACCTC AGGGCTAGGA 120
 CAGGAGCAAG AGGAAGGGTC AGAGGGCCAG GAGGCAGCCA CTGGGAGTGG CGATGGGAGG 180
 CAGGAGACAG GAGCAGCTGA AAAATTCCGA TTAGGATTAT CACGGGAGGG AGAGAGGGAA 240
 TTGAGTCCGG AGAGTCTACA GCTCGAG 267

(2) INFORMATION FOR SEQ ID NO:1439:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 301 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1439:

```

GCGATTGAAT TCTAGACCTG CCTCGAGTCA TATCCCTGAG CAGTAGAGTA AATTAAATCC      60
TTTCTGAGAG TCTTAGATGT TTTTCTATGT CTCTTCTTTC TTATTCTCTC TCTGTTTCTT      120
TCTCTCACTC ACACACACAC ACACACACAC ACACACACCC CTAAATTTTG TTCTGAATGG      180
CCCACTAGGG CTGAATCATT TAGTGACTTC ATTGATTACT ATCCTGAGTT CTTCTTCTCTG      240
CTTCCAGACT AGTGAAAATA TTCCAGAAAG CTTTAATATT GGAGAAAAGG CAACGCTCGA      300
G                                                                                   301

```

(2) INFORMATION FOR SEQ ID NO:1440:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 251 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1440:

```

GAATTCGGCT TCATGGCCTA GCATTGGAA GTAATTTTTT AAAACAACAT TCATATTAAT      60
TTAAGGAGCA TAACAGATTC CAGTGAATGT TATGATTCCG TATTGTAACA TTATTCTAGT      120
AAATATGTTG GAGAAGAACA GTTCTAGTGA ATTAACATATG GTTTTGGAAG GCAGCTATGC      180
TCACCATCAT ACCACCAACA CAACCATGGT TTTATTTTAT ATTATTTTATT TTATTTTGA      240
GACAGAGTCT C                                                                                   251

```

(2) INFORMATION FOR SEQ ID NO:1441:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1441:

```

GGAATTGGAA AGCGTTTCCT TGCCAACACC AGAAATCCAG TCAGATTCTT TACATAGCAA      60
AGTCGAAGCT CCTCCTTCAG AGGTGGCGGA TACGTTAGTA ATAATGACTG CTTCCAAGGG      120
TGTTCGACTC CCAGAACCCA AAGATAAGAT TTTGGAGACA CCTCAGAAAA TGACAGAAAA      180
ATCTGAATCA AAGACACCAG GAGAAGGGAA AAAGGAAGAT AAAAGCAGAA TGGCAGAACC      240
AATGAAAGGC TACATGAGAC CCACCAAGCT CGAG                                                                                   274

```

(2) INFORMATION FOR SEQ ID NO:1442:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 274 base pairs

(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1442:

GAATTCGGCC TTCATGGCCT ACCTTTCTCC ATGTTTAACT GGGCTGCTCC CCATTCTCTG	60
CCTCCCTGTC TCCTCAGCCG CCAGAGCCCA GCCCTCCGA CCAGGCCTCA CCCACCCCA	120
CCCGACCTT CCCTGAGGGT CCTTTCCTCA GTACCACTGA CACTTGGAGG CAGGAAACCC	180
AAACCTCCTT AACTAAGGCC TCATTACCT CGAAAGCAGT GGTGCTTCCC TCTGTTTCATC	240
CAGGGCCATA AAGCCACTGT CCCCTTAACT CGAG	274

(2) INFORMATION FOR SEQ ID NO:1443:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 257 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1443:

GAATTCGGCC TTCATGGCCT AATTGCGCCA TTGCACTCTA GCCTGGGCGA CGGAGCAAAA	60
CTCCATCTCA AAAAAAAAAA AAAAAAAAAANN NANTCNGAAA CAGAAAAAAA AAAAAAGAATA	120
CACTGCATTG CCATTATCTA GTCACCCTGT GTAATATAGC AGCAGAACTC ATGCTTCCTG	180
TCTTAACTGT AACTTTGTAT CTGCTGACCA ACCTCTCTCC ATCCCTCTCT CCCACCTACC	240
CTCCCCAGTC CCTCGAG	257

(2) INFORMATION FOR SEQ ID NO:1444:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 258 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1444:

GAATTCGGCC TTCATGGCCT AGGAAGCATT AAATTGGGCC ATAGGAAGGA CAAGTCACAT	60
CCAGTTTAGT GATCAATGGT GGTGTTGGGA AGAAATAACA GAATTCTACT CCTACATGAT	120
AGGGAGAGAC TACAGAGGCC ACCTAGACCA ACAAACCTCTG CCATCAGGTC CTGTAATCAT	180
TGCTACCATG TCCTGGTGGT GGTGTAGCA TTGCTAGTGA TATGTAATC ATTACCTACT	240
TATGCAAACC ATCTCGAG	258

(2) INFORMATION FOR SEQ ID NO:1445:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 638 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1445:

GGATGGCTAC GGCAGGGGGT GGCTCTGGGG CTGACCCGGG AAGTCGGGGT CTCCTTCGCC	60
TTCTGTCTTT CTGCGTCCTA CTAGCAGGTT TGTGCAGGGG AAATCAGTG GAGAGGAAGA	120
TATATATCCC CTTAAATAAA ACAGCTCCCT GTGTTGCCT GCTCAACGCC ACTCATCAGA	180
TTGGCTGCCA GTCTTCAATT AGTGGAGACA CAGGGGTTAT CCACGTAGTA GAGAAAGAGG	240
AGGACCTACA GTGGGTATTG ACTGATGGCC CCAACCCCCC TTACATGGTT CTGCTGGAGA	300
GCAAGCATTT TACCAGGGAT TTAATGGAGA AGCTGAAAGG GAGAACCAGC CGAATTGCTG	360
GTCTTGCACT GTCCTTGACC AAGCCCAGTC CTGCCCTCAGG CTTCTCTCCT AGTGTAACAGT	420
GCCCAAATGA TGGGTTTGGT GTTTACTCCA ATTCCNATGG GCCAGAGTTT GCTCACTGCA	480
GAGAAATACA GTGAATTCG CTGGGCAATG GTTTGGCTTA TGAAGACTTT AGTTTCCCCA	540
TCTTTCTTCT TGAAGATGAA AATGAAACCA AAGTCATCAA GCAGTGCTAT CAAGATCACA	600
ACCTGAGTCA GAATNGGTCA GCACCAACCC GACTCGAG	638

(2) INFORMATION FOR SEQ ID NO:1446:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 269 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1446:

GCGAGCTCGT GTTTTAAAGG ACCAAATAGA AGTTTACCAG GAGAGAAGTG ACAGAAGTGC	60
TGTCTAGATA GAGGAAGGGC ACACACAGAT GCAAGCATGT GCAGAAATGA GCAAACCACT	120
GAGACGCTGC CTTGAGCTCT GTGTCACACT GCTATGTTGC AGCCTGGGAG GCTGTTCCCA	180
GTTGAGCCCT TCGGAACCAAG CCATGAGATG GCACGGGTAC GCGGAAGGGA GCAGTCTCCA	240
TGGCTGGGTG GTGATGGGGG CTTCTCGAG	269

(2) INFORMATION FOR SEQ ID NO:1447:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 355 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1447:

GGTCTCTCGC CGCCGGAGGA AGATGAGGCT GAAGATTGGA TTCATCTTAC GCAGTTTGCT	60
GGTGGTGGGA AGCTTCCTGG GGCTAGTGGT CCTCTGGTCT TCCCTGACCC CGCGGCCGGA	120
CGACCCAAGC CCGCTGAGCA GGATGAGGGA AGACAGAGAT GTCATGACC CCATGCCCAA	180
CCGAGGCGGC AATGGACTAG CTCCTGGGGA GGACAGATTC AAACCTGTGG TACCATGGCC	240
TCATGTTGAA GGAGTAGAAG TGGACTTAGA GTCTATTAGA AGAATAAACA AGGCCAAAAA	300
TGAACAAGAG CACCATGCTG GAGGAGATTC CCAGAAAGAT ATCATACTTC TCGAG	355

(2) INFORMATION FOR SEQ ID NO:1448:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1448:

```
GAATTCGGCC TTCATGGCCT ATCCTCTGCC AAGACCAAAA GGAAAGAAGA AAAAGGGCCA      60
AAGCCAAAA TGAACTGAT GGTACTTGTT TTCACCATTG GGCTAACTTT GCTGCTAGGA      120
GTTCAGCCA TGCCTGCAA TCGCCTCTCT TGCTACAGAA AGATACTAAA AGATCACAAAC      180
TGTCACAACC TTCCGGAAGG AGTAGCTGAC CTGACACAGA TTGATGTCAA TGTCCAGGAT      240
CATTCTGGG ATGGGAAGGG ATGTGAGATG ATCTGTTACT GCAACTTCAG CGAATTGCTC      300
TGCTGCCCAA AAGACGTTTT CTTTGGACCA AAGATCTCTT TCGTGATTCC TTGCAACAAT      360
CTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1449:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 267 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1449:

```
GATTTCTTAC CCAAAGCTCT GGAATTGTAC ATTTATTTTT TAAAACTCAA AGAGGGAAAG      60
AGCCTTGAT CATATGTGAA CATTGTATCA TAGGTAATGT TGTACAGACC CTTTATACA      120
GTGATCTGTC TTGTTCTGCG AGCAAAAATC CTCTATGGAC ATAGGAGGTG CTGTGTCCCA      180
TGCCCTCTTG CCCTGACAGT GTCCCATGGG CCCCCTTCTG CTCCCTGCCC CCTCCCTGCT      240
ACTGCTGATG CACTCCCCCC CCTCGAG
```

(2) INFORMATION FOR SEQ ID NO:1450:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 431 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1450:

```
GCGATTGAAT TCTAGACCTG CCTCGAGACC TGGGGGGAGA TTGGGCTCCC TTTCTCATG      60
ACATCCTGCC CTATCAGGAC TCTGGAGATA GTGGGAGCGA CTACCTTTTC CCAGAAGCTA      120
GTGAAGAATC AGCAGGCATC CCGGGAAAGT CAGAAGTTCC CTACGAAGAG CTGTGGCTGG      180
AGGAAGGCAA GCCCAGCCAT CAGCCTCTCA CTCGCTCTCT GAGCGAGAAG AACAGATGTG      240
ATCAGTTTAG AGGTTCTGTC CGATCCAAAT GTGCGACTTC TCCTCTTCCC ATCCCTGGGA      300
CTCTGGGAGC AGCAGTGAAG TCTTCAGATA CTGCCCTACC TCCACCTCCA GTGCCCTCCA      360
AATCTGAAGC CGTCAGAGAA GAATGCCGGC TCCTGAACGC CCCACCTGTT CCACCCCGAA      420
GCGCACTCGA G
```

(2) INFORMATION FOR SEQ ID NO:1451:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1451:

GCCTGCCCCC	ACCTTACAGG	TCTGGGATGT	ACCTTTCCAT	CTGTTGCTGC	TTTCTTCTAT	60
GGGCCCTGTC	CCTCACTCTC	AAGAACCTCA	ACTACTCCGT	GCCGGAGGAG	CAAGGGGCCG	120
GCACGGTGAT	CGGGAACATC	GCGAGGGATG	CTCGACTGCA	GCCTGGGCTT	CCGCCTGCAG	180
AGCGCGGCCG	CGGAGGGCGC	AGCAAGTCGG	GTAGCTACCG	GGTGCTGGAG	AACTCCGCAC	240
CGCACCTGCT	GGACGTGGAC	GCAGACAGCG	GGCTCCTCTA	CACCAAGCAG	CGCATCGACC	300
GCGAGTCCTT	GTGCCGCCAC	AATNCCAAGT	GCCAGCTGTC	CCTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1452:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 335 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1452:

GGGGCAGAAG	TGAATATAC	CGGCAATTTT	GCGAGCACCC	AAGGAGAGAA	AACCAAGTAA	60
AAAAGAAGGA	GGCACACAAA	AGACATCTAC	TCTTCCTGCA	GTACTTTATA	GTTGTGGGAT	120
TTGTAAGAAG	AACCATGATC	AGCATCTTCT	TTTATTGTGT	GATACCTGTA	AACTACATTA	180
CCATCTTGGA	TGTCTGGATC	CTCCTCTTAC	AAGGATGCCA	AGAAAGACCA	AAAACAGTTA	240
TTGGCAGTGC	TCGGAATGTG	ACCAGGCAGG	GAGCAGTGAC	ATGGAAGCAG	ATATGGCCAT	300
GGAAACCCTA	CCAGATGGAA	CCAAACAAC	TCGAG			335

(2) INFORMATION FOR SEQ ID NO:1453:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 627 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1453:

GCGATTGAAT	TCTAGACCTG	CCTCGAGATC	CCCATGACTC	CTACATCCTC	TTTTGTGTCT	60
CCGCCACCAC	CCACTGCCTC	ACCTCATTCC	AACCGGACCA	CACCGCCTGA	AGCGGCCGAG	120
AATGGCCAGT	CCCCCATGGC	AGCCCTGATC	TTAGTAGCAG	ACAATGCAGG	GGGCAGTCAT	180
GCCTCAAAAG	ATGCCAACCA	GGTCACTCC	ACTACCAGGA	GGAATAGCAA	CAGTCCGCCC	240
TCTCCGTCTT	CTATGAACCA	AAGAAGGCTG	GGCCCCAGAG	AGGTGGGGGG	CCAGGGAGCA	300
GGCAACACAG	GAGGACTGGA	GCCAGTGAC	CCTGCCAGCC	TCCCGGACTC	CTCTCTGGCA	360
ACCAAGTCCC	CGCTGTGCTG	CACCCTCTGC	CACGAGCGGC	TGGAGGACAC	CCATTTTGTG	420
CAGTGCCCGT	CCGTCCCTTC	GCACAAGTTC	TGCTTCCCTT	GCTCCAGACA	AAGCATCAAA	480
CAGCAGGGAG	CTAGTGGAGA	GGTCTATTGT	CCCAGTGGGG	AAAAATGCCC	TCTTGTGGGC	540
TCCAATGTCC	CCTGGGCCTT	TATGCAAGGG	GAAATTGCAA	CCATCCTTGC	TGGAGATGTG	600
AAAGTGGAAA	AAGGAGAGCG	ACTCGAG				627

(2) INFORMATION FOR SEQ ID NO:1454:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 394 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1454:

GAAC TTGAC	ACCTACACTT	AAATTCTGAG	TCATTAAACA	GGCCTACATT	TATCAACTGT	60
GGAAATATCA	GCCAGTTTTT	GCAAACCTCT	TCTTAGGACA	CTAAGTTGTT	TGCAGAAATC	120
ACTAGCATTG	ACTGACTCAG	CAACAATGTG	GTTATATTCT	TTGATTAACT	TAGTCCTTTT	180
TCTTGGTCAA	GAGTCAGTAG	ACAGGACTGA	AGCTTATGCC	CCTTGCCCCC	CCACCACCAC	240
TCCATTACTA	CCACCTTGGT	TTAGCCATCC	TTTCTTGATC	TGTTCTCCCC	ACTTCTACTG	300
TGCTACTCTA	CAGACTTGCC	CTGAATGTAA	GAGCAACAAT	TACCTTGTA	AGTCCAAGTT	360
GGGGCAGGTC	ACTCCCAAAC	TCCACAACCT	CGAG			394

(2) INFORMATION FOR SEQ ID NO:1455:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 381 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1455:

CAGATGTTCA	GATATATCTT	GAATTTTCTA	CGAACATCCA	AACTCCTCAT	TCCTGATGAT	60
TTCAAGGACT	ACACTTTGTT	ATATGAAGAG	GCAAAATATT	TTCAAGTTCA	GCCCATGTTG	120
TTGGAGATGG	AAAGATGGAA	GCAGGACAGA	GAACCTGGTC	GATTTTCAAG	GCCCTGTGAG	180
TGCCTCGTCG	TGCGTGTGGC	CCCAGACCTC	GGAGAAAGGA	TCACGCTAAG	CGGTGACAAA	240
TCCTTGATAG	AAGAAGTATT	TCCAGAGATC	GGCGACGTGA	TGTGTAACCT	TGTCAATGCA	300
GGCTGGAATC	ACGACTCGAC	GCACGTCATC	AGGTTTCCAC	TAAATGGCTA	CTGTACACCT	360
AACTCAGTCC	AGGTCCTCGA	G				381

(2) INFORMATION FOR SEQ ID NO:1456:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 309 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1456:

GGTGACGCCT	GCTTCACATC	TCTAATGAAC	ACCCTCATGA	CGTCGCTACC	AGCACTAGTG	60
CAGCAACAGG	GAAGGCTGCT	TCTGGCTGCT	AATGTGGCCA	CCCTGGGGCT	CCTCATGGCC	120
CGGCTCCTTA	GCACCTCTCC	AGCTCTTCAG	GGAACACCAG	CATCCCGAGG	GTTCTTCGCA	180
GCTGCCATCC	TCTTCCTATC	ACAGTCCCAC	GTGGCGCGGG	CCACCCCGGG	CTCAGACCAG	240
GCAGTGCTAG	CCCTGTCCCC	TGAGTATGAG	GGCATCTGGG	CCGACCTGCA	GGAGCTCTGG	300
TTCTTCGAG						309

(2) INFORMATION FOR SEQ ID NO:1457:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 374 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1457:

```

GCACTATTAA ACAGATACAA CACAGAATAG TATGTATAGA GCATGGTATG TAGCAGGGGC      60
CTATTCCTGT CTGAGTGGAC AAGGAGGCTT CCTAGAGGAA GCAACATTTA AAGCTGAGGG      120
CTGAAGGATG AATAGGATTT AACCAAGTAA AAGTAAGAAA GGAAGTGGGG AGCTGGAAAG      180
GGCATTCCAG GAAGAAGAAA CTGCATGTGC AAAGGCCAGG AGGTCAGAGC GCACAGTGGA      240
TATGACGATG TGGCTAGCTG AGCATGTCTG TGCAGTGTCA ACTTTGTGTG GAACACAGAG      300
GGAGGGTACT GGGAAATTTT AAGCAAGAGA GTTGGAGTAT GATCACAATT GCATGTTAGA      360
AAGACACACT CGAG

```

(2) INFORMATION FOR SEQ ID NO:1458:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 316 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1458:

```

GAATTCGGCC TTCATGGCCT ACATATTTAT TATGTCAACC TGTACTTCCC TTTCCTCTT      60
CCTCTCCCTC TTTTCICTCC CTCTCCCTCT CTCTCTCTTC CTTCCTCCCC TTCCAGGTAC      120
CCTAGATGAA CCATGGGAGG TCCTGGCTAC ACAGCCATTC TGTCTGAGAG AGTCTGAGGA      180
CTCTGAGACC CAGCCTTTTG ACACGCACCT TGAGGCCTAT GGACCTTGCC TGTCTCCACC      240
TAGGGCAATA CCAGGAGACC AACATCCAGA GAGCCCAATT CACACAGAGC CAATGGGGAT      300
TCCGGGCAGG CTCGAG

```

(2) INFORMATION FOR SEQ ID NO:1459:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 417 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1459:

```

GGAACCACCA ATTCCGGACA CACTGGGATT ACAGTTCAG GAAGGATGTT ACCTTTGACG      60
ATGACAGTGT TAATCCTGCT GCTGCTCCCC ACGGGTCAGG CTGCCCCAAA GGATGGAGTC      120
ACAAGGCCAG ACTCTGAAGT GCAGCATCAG CTCCTGCCCC ACCCCTTCCA GCCAGGCCAG      180
GAGCAGCTCG GACTTCTGCA GAGCTACCTA AAGGGACTAG GAAGGACAGA AGTGCAACTG      240
GAGCATCTGA GCCGGGAGCA GGTTCCTCTC TACCTCTTTG CCCTCCATGA CTATGACCAG      300
AGTGGACAGC TGGATGGCCT GGAGCTGCTG TCCATGTTGA CAGCTGCTCT GGCCCTGGA      360
GCTGCCAACT CTCCTACCAC CAACCCGGTG ATCTTGATAG TGGACAAAGT GCTCGAG      417

```

(2) INFORMATION FOR SEQ ID NO:1460:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 222 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1460:

GAATTCGGCC TTCATGGCCT ACTGAGAAAA AAAATCAAAT CTAATTTTAA AATGAAGGTA	60
TTTAAAACCA TGGCACAAGG GAGCCTTATT TATGGAGCTG GTGGGAAGCC AGGATGTTTC	120
CAATCCGCTG CTCTTACAGG AGCCTGTGCC TCGCCAGTTC TGTGCTGCAG TGGGCAGCCA	180
ACTGAAGTGC ATGAGTCAAA TGCACGAAGC AGCAGACTCG AG	222

(2) INFORMATION FOR SEQ ID NO:1461:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 256 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1461:

GCTGCCTCCA TACTGTTTTA GGCAGCACCG TTTATGTGAC AGAGTCCGTG TTTCTCAAAT	60
GCATGGTGTT CCTCAGGTGG AGAGTGGGCA GAAGTTTTTG CAACACTTTT TTTTAAAGTT	120
ATTGGGTGCA AAATCCCAAA CCAGGATATG TGTATGTCTG TGTGTTATG TTTTATTATT	180
GACCCCTCCC TCTTCAACC TACCCCTTTT TATATCTAAT GTAGAAAAAG CGAAATTGAA	240
TCTGGAAAAA CTCGAG	256

(2) INFORMATION FOR SEQ ID NO:1462:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 250 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1462:

GGGGGTGGAA GCGTAGTGC TTGAAATGCA GGGATCTGGC AGTCAGCAGA AGGATCTGAG	60
ACCCAGTGTC GAGGTTAAAA AAAAAACAAA AAACCAAAAA CCAATGCAGG AATCCAGTGG	120
GTGGAGTGAG GGGATCTGGG ATCCAGTGAT GGGGGCCCCA GGATCCAGGC ATTGTGGTTG	180
TCAGGATCCA GTGGTGAGGT TTGTTGACAT CCAGAATCCA GCAGCTGAGC TTGGAGATCC	240
AGGGCTCGAG	250

(2) INFORMATION FOR SEQ ID NO:1463:

(i) SEQUENCE CHARACTERISTICS:
(A) LENGTH: 279 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1463:

```

GAATTCGGCC TTCATGGCCT AAGTTTATAA AAATTCAGC CAGAAAAACC CAGGTAAGGA      60
TTTTTTTAT TTTTTTTTA TTTTATTTT TAGACCAGGT GAGAATCCTT TGTCCACTG      120
AGATTTTAAA ATTTAGTACA TTCAAATTG ATATTTCTAC CATTTTCTCA GCCTGCTTGT      180
CTTCTTATCT TTGCAGCACT GCTTATTGCC ATCACTGCTT ATCTGTTTCA TCAACTTGAA      240
ACCTCAGAAT TGTCTTGAC CTCATCCCA CATCTCGAG      279

```

(2) INFORMATION FOR SEQ ID NO:1464:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 266 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1464:

```

GAATTCGGCC TTCATGGCCT AGGCCATTG GTTCTAACT GCTTGACTAG TTTAAGCTC      60
ACATAATTCC TTAAGCTTTC ATATTTTCTT AAATGCAAGG AAATGAATAT AAAAGCACTA      120
AATCTCCTGG TTCACTGGTA CAAAATTAC AATGGTCAGT TCCCTTAGGT CATCAAAAC      180
TAGTCACAAA AATAGTTCTT GTATTCAACC TGAATGTGCC ACAGGAAAAA AAAAATATT      240
TCAAGATTTT CCAGCTCAGC CTCGAG      266

```

(2) INFORMATION FOR SEQ ID NO:1465:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 259 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1465:

```

GAATTCGGCC TTCATGGCCT AACATTTTC TGAAAAACGT GATAGAAAGA AGGAGGAGCT      60
GTTTCTAGGA GGGAAATAAA TAATTGGCA GGAGACTTTT TGAAGTAGAT ATCTATTGAA      120
TAACAAAGTG ACAATGTTCC CCATCCTCTC ATTTCCATTC CCAATTTTAC TTCTCGTCCC      180
AATTCAAATC ATTCTTACTT ATGATCGGCG CTATGTCAGT GCCTCTCAGC TGGTCTTCCC      240
AGACCCAGTC ACCCTCGAG      259

```

(2) INFORMATION FOR SEQ ID NO:1466:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 332 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1466:

```

GCGCCTATCA CAAGCAGATC ATGGGTGGCT TCAAGGAGAC GAAGGAGGCT GAAGATGGCT      60
TCCGCAAGGC CCAGAAGCCT TGGGCCAAGA AGATGAAGGA GCTGGAGGCA GCCAAGAAGG      120
CCTACCATTG GGCTTGCAA GAGGAAAAGC TGGCCATGAC ACGGGAGATG AACAGCAAGA      180
CGGAGCAATC GGTACACCT GAGCAGCAA AGAAGCTGCA GGACAAAGTG GACAAGTGCA      240

```

AGCAGGATGT GCAGAAGACA CAGGAGAAGT ATGAGAAAAGT GCTGGAAGAT GTGGGCAAGA 300
CCACACCCCA GTACATGGAG AACAACTCG AG 332

(2) INFORMATION FOR SEQ ID NO:1467:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 301 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1467:

GCTCGAGATG TGCTGTCTTC CATGCAAAGT GGAATTTGAC AATCACTGTG CCGTGCCTTG 60
GGACATCCTG AAAGCCAGCA TGAACACATC CTCTAATCCT GGGACACCGC TTCCGCTCCC 120
CCTCCGAATT CAGAATGACC TCCACCGACA GCAGTACTCC TATATTGATG CCGTCTGTTA 180
CGAGAAACAG CTCATTGGT TTGCAAAGTT TTTCCCCTAT CTGGTGCTCT TGCACAGCT 240
CATCTTTGCA GCCTGCAGCA ACTTTTGGCT TCACTACCCC AGTACCAGTT CCAGGCTCGA 300
G 301

(2) INFORMATION FOR SEQ ID NO:1468:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 436 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1468:

GAATTCGGCC TTCATGGCCT AGTGGAAAAT GGGAGGCATG AAATACATCT TTTCGTTGTT 60
GTTCTTTCTT TTGCTAGAAG GAGGCAAAC AGAGCAAGTA AAACATTGAG AGACATATTG 120
CATGTTTCAA GACAAGAAGT ACAGAGTGGG TGAGAGATGG CATCCTTACC TGGAAACCTTA 180
TGGGTGGTT TACTGCGTGA ACTGCATCTG CTCAGAGAAT GGGAAATGTC TTTGCAGCCG 240
AGTCAGATGT CCAATGTTT ATTGCCTTTC TCCTGTGCAT ATTCCTCATC TGTGCTGCCC 300
TCGCTGCCCC GAAGACTCCT TACCCCCAGT GAACAATAAG GTGACCAGCA AGTCTTGCGA 360
GTACAATGGG ACAACTTACC AACATGGAGA GCTGTTCGTA GCTGAAGGCG TCTTTCAGAA 420
TCGGCAACCA CTCGAG 436

(2) INFORMATION FOR SEQ ID NO:1469:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1469:

GAATTCGGCC TTCATGGCCT AGTCTGGGCA ACAGAGCGAG ACCTTGCTCT AAAAAAAAAA 60
AAAAAAAAAC AAAGTAAAAA AAGATATGTG TTTGATTAAT AACAGTCTCTG ATTTAAAAACA 120
ACAGCACTGT CTTTGGAGCC TTTACTCAGT ATGCAACTCC TTTATACAGA TTTTATTTTA 180
ATTTTATATA CACACTGCTT GAGAAGCATA TTTATTTCCG TTTTGTGTG TGCATGTGGT 240

GGACAGGAAA CAGTGGTTCA GAGAGATGAA GCACCCTGCC CACCACATGC ACTCGAG 297

(2) INFORMATION FOR SEQ ID NO:1470:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 325 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1470:

GAATTCGGCC TTCATGGCCT AGGACCTATT CTATCAGCAG CATTGACAC CACTGATTAC 60
TCATTCTGCT CTGGTGTACT TTCTCAATT GCTTCCAAGA CACCATAAAT TCTTCTGCCT 120
TGCTGGCTGC CTTTGCTGGT TCCTCCTCTT CTCCTGACC TCTTAATGTT GGAGAACCAC 180
AGGGCTTAGT CCTTGGTCCT CTCTCTCTT TTCTTTACAC TGTGGTCCTC AGTGAGGGAG 240
ATAGGTAGAT CCACTGTCCC GATCTTAACC CAAAGAAAGA CTTGCTGTCC AGCTACGGGG 300
GCTGTGTCA GAAGGCAGCC TCGAG 325

(2) INFORMATION FOR SEQ ID NO:1471:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 421 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1471:

GAATTCGGCC TTCATGGCCT ACAAAGGAT GGGAAATGCC TGCATTCCCC TGAAAGAAT 60
TGCTTATTC CTATGTCTCT TATCTGCGCT TTTGCTGACT GAGGGGAAGA AACACCGAA 120
GCCAAAATGC CTTGCCGTGT GTACTGTAC CAAAGATAAT GCTTTATGTG AGAATGCCAG 180
ATCCATTCCA CGACCGTTC CTCCTGATGT TATCTCATTA TCCTTTGTGA GATCTGGTTT 240
TACTGAAATC TCAGAAGGGA GTTTTATT CACGCCATCG CTGCAGCTCT TGTTATTCAC 300
ATCGAACTCC TTTGATGTGA TCAGTGATGA TGCTTTTATT GGTCTTCCAC ATCTAGAGTA 360
TTTATTCATA GAAAACAACA ACATCAAGTC AATTCAAGA CATACTTTCC GGTACTCGA 420
G 421

(2) INFORMATION FOR SEQ ID NO:1472:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 233 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1472:

GAATTCGGCC TTCATGGCCT AGTACTCCAT CTCATCCATC TCATGGTAGT TCAGAAATGC 60
CTATATTCTT TCTTAAATC ACCAGGATT TTGTTTTTC TTTCACCCC TTTTGCCTT 120
TCTTATTTTC ATCCTTCCAT TTCATCATT TCCATCATG TTTAGCAGTT TCTATCCTTT 180
CTTTTCTGG CGTTTATGCG TCACACATAG AAACCTATCA CCATCAGCCC TCG 233

(2) INFORMATION FOR SEQ ID NO:1473:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 253 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1473:

```

GCGATTGAAT TCTAGTTGCC TACCTACCA ACTACCTACT GAACTTTTTA ATTTGAAGAT      60
ATTCTTCCTG GACTACTTGT TTATAGTTTA TAAATGAAC TGCTCTATTT CTAAAACTT      120
TATTTTAAA  GTCCTTTCCC GTTTAGAATG CGGCATACTC TTGCTTGTGG GGTATATATC      180
TCTGATCGTG ATAACACCT ACCGAAAACC TTTCATGGCT CCTTGCCAAC TACAAAATTG      240
CGATATCCTC GAG                                     253

```

(2) INFORMATION FOR SEQ ID NO:1474:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 424 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1474:

```

GAATTCGGNC TTCATGGCCT ACCGCAAGTT CCTCCTGACC TTCAGGGAGC CTGACTTAGA      60
GAAGAAGTAC TCCAAGCAGG TAGACGACCG ATTTGGTGCC TATGTGGCGT GTGCCTCGCT      120
CGTCTTCCTC TTCATCTGCT TTGTCCAGAT CACCATCGTG CCCCACTCCA TATTCATGCT      180
CAGCTTCTAC CTGACCTGTT CCCTGCTGCT GACCTTGGTG GTGTTTGTGT CTGTGATCTA      240
CTCCTGCCGA AAGTCTTCC CCTCCCCACT GCAGACCCTC TCCAGGAAGA TCGTCCGGTC      300
CAAGATGAAC AGCACCTGG TTGGGGTGTT CACCATCACC CTGGTGTTCC TGGCGGCTTT      360
TGTAACATG TTCACGTGCA ACTCCAGGGA CCTGCTGGGC TGCTTGGCAC AGGAGCGTCT      420
CGAG                                     424

```

(2) INFORMATION FOR SEQ ID NO:1475:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1475:

```

GAATTCGGCC TTCATGGCCT ACTCTGTGTT GGTAAGTAAA AGCCCTCCAG CATAGGTATA      60
CACTTAGTTG TTCCTTCCAG TGGTTATCAT ACTTCTTTTC TTGCCATAGT TACATGCTAA      120
CAACGTCCCA AAGCTATAGT TGCTCTTGCA TTTTGTCTT AATTCTTGTA AGATAAACTA      180
ATAATACAGG GAGTAAATGT GCACTGTTTA TTAATTAATA TCCCGGGGAC ACGGGATAAA      240
CTGAAGGAAA TCGTGCTTTT TGAAAAGTAG GTGTAGCTTG CCATGCTGCA TTGTCTTATA      300
CCCACAAAAC TCGAG                                     315

```

(2) INFORMATION FOR SEQ ID NO:1476:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 321 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1476:

```
GAATTCGGCC TTCATGGCCT AGCCATCATG TTTATTAGAA GGTGGATT TGGTGTGTGC      60
TCTAGACAGA TACAGAATAA ATACCTGCGC CTTGAGAACA GGAAGTCCAC GATTCATACA      120
AAGTGCTCAC TACAGGAAGT TGCTGTGTCA AAATCCAGGC AAGGACCCAA CTCGGGCAG      180
CCCCCTCTCC CTGCTGACCT CAACAAGGCG TGTGCTATTG TTTTATTATT TATTATTTTA      240
TTTCTCTTTA TTATTATTAA TATTATTATT ATTTGCTTTT GCTGTGGTCA CTATCATTGG      300
CAAAGTTCCT TTTCCCTCGA G                                     321
```

(2) INFORMATION FOR SEQ ID NO:1477:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 215 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1477:

```
GAATTCGGCC TTCATGGCCT AAGCAAAGCT AAGTGTAATA CTAAAAAGCA GTTTGTTGCA      60
ACTGGTCATA AAAGTGATTA AATCTAAAGC TGGCATTAAAT AAGGAAGCAA GGTAATAAAA      120
CAAAAATATA AACAGCTTTG AGAAAGTACA CCTAATAACA AAATCTTGTA ACACAACAAA      180
TGAAAATCAC AAAAAATATA AGGAGACTCC TCGAG                                     215
```

(2) INFORMATION FOR SEQ ID NO:1478:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 291 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1478:

```
GAATTCGGCC TTCATGGCCT AATCGGTCTC CTTTGGAGAG ATCACTAGAA CAGAAAAACA      60
ACCCAGATTA TAACTGGAAT GTTCGGAAAA CATAAAGGAC AGCTCGTAAA GGAGAGAGTA      120
AGAGTCACCA AACACGTGGA TATTTTGGT CTGATCCTAC AGTAGCCGGT TATCTAGACC      180
AGTAAGTGA GTTTTGGACA TGCTGCTGCT GTCAACTCAC TGGCTGAAGG AGCACTTCAA      240
GGAATGGGAG GCCTTCACT GGGTCCAGCT CTGATTCGGA TCACTCTCGA G                                     291
```

(2) INFORMATION FOR SEQ ID NO:1479:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 514 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: double
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1479:

```

GAATTCGGCC TTCATGGCCT AGAGAAAGAA ATGGCTCGAA CAGAAAACAG TGGTCTTGAA      60
AGGCAACGCA ACAGTAGGTT ACAAATAGCA TTAGCTTTTT CTTTAAAGAA ATTCATTGTA      120
ACCAAGTGAAG GATAAGATTT TAAATTAGAA AAATGGAAAT CCTATGAATA AAAAAGTAGT      180
AAGCTTGAGA GCAGAATCAC TGTGAAAAA AAACAGATTG AAAAATAACT TGCAGGTATC      240
ATAGACAGGA AATTGCCACT AGAGAAAACA GGAAACTTGT GATAGATAAA AATGAAGTAT      300
TTTCATTGGG AACAGAGAC CAACTGAAGA GAGATCAAGT GAAGGGGGTT TATTTTAATG      360
AAACACAAAG ATTCTTGTGG AAATCAAAGT GCCGGAGCCA GAAACAGGGC TCAACCTTCA      420
AGAATTAGAGC TGTATTCAAG TTGTTCAAGT TGGCTCTCGG TCCCAAAGCA ACAGCAATGT      480
CACTAAGGTT ACAAGTAAAA GGTAAGCCCT CGAG                                     514

```

(2) INFORMATION FOR SEQ ID NO:1480:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 194 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1480:

```

GAATTCTAGA CCTGCCCTC CACTGCTCCC CATACCCTGG CACGATGCGT TCCTGGTCAC      60
TGATCACCAT CATTTTGGGA AGAGAATCCC AATCCCTGGC ACCTGGGTTT GCCTCATCCA      120
ACCATCCTTC CTTTCTCAG CTGCACCCC TCTGCAGATC TGAAGACACA CCTCACTCTT      180
CCAGGGCCCT CGAG                                     194

```

(2) INFORMATION FOR SEQ ID NO:1481:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 385 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1481:

```

GACGCGCCCG GCCTCCTCTT TCATTTAGT ATACGTAATA AGAAGTCAGA AATTACCTTT      60
AACCAAGCCT GGAAATCTCC TTATCTAGAT CATTATATTC TTTAGGTACA TTTTACTT      120
TCTACATTAC CACTCACAAC AATATTGCTA AATTTTTCCT TCTAAATAAG AAGGATTCCC      180
TTTTTCTAAT AACACTTTCT TTATTTTCT TTAACCTTTC ACTGAAAGCC CCCTCAAAG      240
CTACCTGGCT TATGCTAACA GTATGTTGA TGTCCCTTCA ATACTACTCT GTTTCATCT      300
GTCTAGCATC CACCTGCCTC CCAATCTCAA AGTCTCCATC ATATTTTGTG AGTTTTTAGT      360
TTTTTTGTTA TGGTGCAACC TCGAG                                     385

```

(2) INFORMATION FOR SEQ ID NO:1482:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 376 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1482:

GAATTCGGCC	TTCATGGCCT	AGGTTCTGGG	ATAGCTGATT	GTTGGCCACC	CCCGCCCTGG	60
AATGGAAACC	CTGTTAGGCC	AGGGCCAGAG	CAGGTGGCCA	TGAAGCAAGA	CGGCAAAGGC	120
ATTGGAGGAT	GTCCCACCTC	CACACATACG	CCCAGGCATT	TCTTGGCTGG	GGAATGGTGT	180
TACAGGATCC	ACAAGCACAG	AGATGGGAAA	ACAGTGTGTC	TGGGGAACAC	CAAGAGTTGG	240
GGTTGCCTGG	AGGACAGATA	GACTCAGGGG	GGACATCCAG	AGGTAACACT	AGGTCCGCAG	300
GTGGGTTTCA	AGGCCCCAGC	TCTATCCCCT	TATTCCCAGC	CGGATTAAAG	AATAATCTGA	360
GTATGGTTCC	CTCGAG					376

(2) INFORMATION FOR SEQ ID NO:1483:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 347 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1483:

GAATTCGGCC	TTCATGGCCT	ATGGATCCAT	CATGGGACAA	TTACTAGTTA	TTTACTTTCC	60
TCCGCTTCAG	AAGGTTTTTC	AGACTGAGAG	CCTAAGCATA	CTGGATCTGT	TGTTTCTTTT	120
GGGTCTCACC	TCATCAGTGT	GCATAGTGGC	AGGCCTGGTC	AGTAATCTTC	TCTACTGTTA	180
TAGTACAGCA	GCTTTTAGGT	CCACTGATTG	CATTCTTAAT	TTGAGTATTT	AATATTTATT	240
TTATTAACCT	AAGGTTTTCA	TTTGTCACCT	TAGCATGGTC	TCATAATTTT	CAAAAATCA	300
GAACACAGTA	GATGTTGGCG	TGGATGCAGT	GAACAGGGTT	ACTCGAG		347

(2) INFORMATION FOR SEQ ID NO:1484:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 709 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1484:

GAATTCGGCC	TTCATGGCCT	ACGAGAATAT	TGTGGAGAAC	TGTCAGTAG	AAGAACAAGC	60
AATGGAAATG	GATTTGAGTG	TCCTTCAACA	GGTAGAAGAT	CTAGAAAGGA	GAGTTGCATC	120
AGCAAGTTTG	CAAGTGAAGG	GTTGGATGTG	TCCAGAGCCT	GCATCAGAAA	GGGAGGACTT	180
GGTATATTTT	GAACATAAAT	CATTTACTAA	ATTGTGCAAG	GAGCATGATG	GAGAATTTAC	240
TGGCGAAGAC	GAAAGCAGTG	CACATGCACT	AGAACGGAAG	AGTGACAACC	CCCTAGATAT	300
AGCTGTAACC	AGGCTGGCTG	ATTGGAGCG	GAACATTGAA	AGAAGGTATC	TGAAGAGCCC	360
CTTAAGTACC	ACCATTCAGA	TCAAAGTGA	TAATGTGGGC	ACAGTTACTG	TCCCTGCTCC	420
TGCACCATCC	GTTAGTGGTG	ATGGTGACGG	AATTGAAGAG	GATATTGCTC	CAGGGCTCAG	480
GGTATGGAGA	AGGGCATTAT	CAGAAGCTCG	CAGTGCTGCA	CAGGTAGCTC	TGTGCATTCA	540
GCAATTACAG	AAATCAATAG	CATGGGAAAA	ATCAATTATG	AAAGTTTACT	GCCAAATCTG	600
TCGAAAGGGA	GATAATGAAG	AACGTCTTCT	TCTTTGTGAT	GGCTGTGACA	AAGGCTGTCA	660
TACCTACTGC	CATAGACCCA	AGATTACAAC	AATCCCAGAT	GCTCTCGAG		709

(2) INFORMATION FOR SEQ ID NO:1485:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 272 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1485:

```
GAATTCGGCC TTCATGGCCT ACTGTTTCAG AACTTCCGTA CCTTTTCTT GTATGTAGCA    60
CGTATAAATG CAGCTGTCAT GCAGTTCTTT TCTTTTGCTA GAAAATTAGT CAGGAGGTAA    120
GATGAATCTT CCAAAGTTAT GTTAAATTTT GTTAACTTG ACAAATTAAA CTTTGTCTTT    180
ATTAAACAAA TACGTAACA AATACTGGAA AAGCAAAGCT TATATTGGG AGTAAATGT      240
ATCTTAAAT GCATGTTCAA CTTTGCTCG AG                                  272
```

(2) INFORMATION FOR SEQ ID NO:1486:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 350 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1486:

```
GAATTCGGCC TTCATGGCCT ACCGAGGACG AGGGGAAGAT GTCACGCAAG ATAGAAGGCT    60
TTTTGTTATT ACTTCTCTTT GGCTATGAAG CCACATTGGG ATTATCGTCT ACCGAGGATG    120
AAGGCGAGGA CCCCTGGTAC CAAAAAGCAT GCAAGTGCGA TTGCCAAGGA GGACCCGAATG    180
CTCTGTGGTC TGCAGGTGCC ACCTCCTTGG ACTGTATACC AGAATGCCCA TATCACAAGC    240
CTCTGGGTTT CGAGTCAGGG GAGGTCACAC CGGACCAGAT CACCTGCTCT AACCCGGAGC    300
AGTATGTGGG CTGGTATTCT TCGTGGACTG CAAACAAGGC CCATCTCGAG              350
```

(2) INFORMATION FOR SEQ ID NO:1487:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 276 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1487:

```
GAATTCGGCC TTCATGGCCT AGTACCTGAA GGCCTTCAAG GTGGCCTACA GCCTTAATGG    60
ACACGAATTC GATTTCATCC ATGATGTTAA TAAAAACAC AAGGAGTTG TGGGTAAGT    120
GAACAAAAAC GCGGTGCATG TCAACCTGTT TGAGACCCCT GTGGAGGCTC AGTACGTGAG    180
ATTGTACCCC ACGAGCTGCC ACACGGCCTG CACTCTGCGC TTTGAGCTAC TGGGCTGTGA    240
GCTGAACGGA TGCGCCAATC CCCTGGGCGT CTCGAG                                  276
```

(2) INFORMATION FOR SEQ ID NO:1488:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 595 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1488:

```

GAATTCGGCC TTCATGGCCT AGTGGAGATT ACTTGGCACC ACTCTCCTTT CACAGAGCAG      60
AGTCTGAATA GTCTTCAGAG ATAGGCCTGT GGGCCAGATT GCCATCCCTT ATGGACCAGA      120
AGCCAAGGAT CTCTCTAGTG ATGGTCAGAG GGCCCAAATG GCAGGGATAC CCAGTGATGT      180
CAGGAGGAAT AGTACAGACA GAAGGTGCTA AGCAGACAAT TCAACTGCCA TGTTTGCCA      240
CCCCCTGTGA GCAGGGATTA GGTGTTGAGG CCAGTATCTT GGGCATGGGG GAGCCTTTGG      300
CCAGAAGAGG TATAAGCTC AGAAGTTTTT CAGTCTGATA ACTATTGATA TAATTTCAT      360
AGTGTGAGGG AGCGGTATGC TCTACCCTTG TGTATTTAAG GCAGGACAGA GAAATGAGG      420
ATGCCCCCTG GGCTAGATCG ATGATATGAC CAGAAATCAA AAAGGGAATG CATTATTAT      480
TGCTGTGTAA CACTGTTAAG AGAGGAGGTA GTTAAGGGAT GGATAGGCAC ATAGAGAGGG      540
AAGGTCTCAG GAGAAGGGAT AGAAAGGAAC TATGTTTACA AGAACAACAC TCGAG      595

```

(2) INFORMATION FOR SEQ ID NO:1489:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 297 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1489:

```

GAATTCGGCC TTCATGGCCT ACAATTTAAT AGTATAACAA ATCCCCTAGA ATAGTAGAGG      60
AGAGAGGAAT CTTCCCTGA TATGTTTTTG TAATACTTCT TCCTCCTCTT CAGTCAATAG      120
GGAAATGTTT GTTGAAAGAC TACTTTGCAG ACATTAGAA AGATACAGAG TAAGTGTAAAG      180
ATGTCCCTCC TTGTCCTTGA GGAGTCTCTA GTCAGGCACA GGTAGGACTA AATGAAAAAC      240
AACTACAGAA CTAAGTAGAA GAGGTACAA TAATATGGGG AATGTGGAAC ACTCGAG      297

```

(2) INFORMATION FOR SEQ ID NO:1490:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 273 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1490:

```

GAATTCGGCC TTCATGGCCT ACTTACTTTT CCAAAGAATT TTTCCACCTT GGAATAAGAA      60
GAGAGGACTA GTTGAAACAT TTGAGCTGGA GAGGCTTATG GGCAATATGA AGTGGGCCAA      120
ATTCTTGCAA TACACCCTAT TCAATTGAAA GTACAGTGTC TAAGGATAAG AATACTTCTT      180
TAAAGACCAA CAATTGTTTT AATGCAATCT TAATTAGTAA ATGGTTTACA TTTTCTCTAT      240
TGTTATTGGT TTAAATTTT GCTACCGCTC GAG      273

```

(2) INFORMATION FOR SEQ ID NO:1491:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 660 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1491:

```

GAATTCGGCC TTCATGGCCT ATTGAATTCT AGACCTGCCT CAGGGTAAGG GAGATTTAAT      60
CTTTTCTTTT ACTATTTTCT AGTTTCTATG AGCATGGATT ACTTGTGCAA ATCAAAACAA      120
AACAAACGGA TGGCTCATCC GGCAACATC CATGGGCAGG GTTGGTGTGC GGTGCTGGAC      180
GCAGAGATGA ATGGAGGGCT CTGGCCTCAG CGGCTCACAG TCTGGTGAGC ATAGACAGTG      240
CTTTCGATGT GAGAGCAGAC CTGAGTGTGC CCTGGGACTC CAGGCACAGT TCTCCCTGCA      300
GCTCACAGCA CTTACCCTTA CTGCACCATT AACTTCTACT CTAGCTCACT GCCTCTTAAC      360
TCTGAGCGCC TTGAAGGCAC AAAATGAGTC CCATCTGGGT CTTTAGCAGC TGGCAGAAAA      420
CCTAGCTCAA ACTCATGCTC TAAAAACCCC TGCTGAGGGA GTGGCCGAAT GCAGGCAGCC      480
CTGGCAGTGG GATCAAGTTC AGGGAGTGGC ACTGGAGGCA TCACCCCAAG GCTGAGAAGA      540
CCTTGAAC TGTTTCAGGG TTTTGCTGTC TCTCCCAAG CATGACTCGG CCCAGGAGGA      600
GATGGGGCAG ATGCTGCAGA AGGAGGGTTC ATGCCCTCC ACTGCTGCCC ATGACTCGAG      660

```

(2) INFORMATION FOR SEQ ID NO:1492:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 315 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1492:

```

GCTGTGCTAT CTGTTGTCCA GCATCTGACA CAGTTGGTTT TATATTTTGT CTGGTTTCTA      60
GTTATTAAGC AGGTTAAGTC TGGTTCCTGC TGTTCTATAT AGCAGGAAGC AAAGGTTCTC      120
TCATGAATTT TTAGCATAAT AACATAAGCG TGGATTCCAA AAATTCATTA CACAGATCCT      180
GGAAATCTGT TTACTATGTT TTATACATTC TGTGAAAGCT GGAGAATATA TATTGTTTTT      240
ACTATGTGTA TCGCAATAAA AATATCAATT TCATGTGCCA GAGAATTGAA TACATTATCA      300
AAGGGTCAAC TCGAG                                     315

```

(2) INFORMATION FOR SEQ ID NO:1493:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 356 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1493:

```

GGGACAACAA GCCCATCTGG ATGCACGCAG AGGAGCGGGA GGAAAGCAAG GATAAGCGCC      60
GGGACAGCGC CCCCTATGGG GAATACGGCA GCTGTACAA GGCTGTAAA GTAGACAGCC      120
CCACAGTCAA CACCACCCTG CGCAGCTTGG GGGCCCTATA CCGGCGCCAG GGCAAGCTGG      180
AAGCCGCGCA CACACTAGAG GACTGTGCCA GCCGTAACCG CAAGCAGGGT TTGGACCCCG      240
CAAGCCAGAC CAAGGTGGTA GAACTGCTGA AAGATGGCAG TGGCAGGCGG GGAGACCCGC      300
GCAGCAGCCG AGACATGGCT GGGGGTGCCG GGCCTCGGTC TGAGTCTGAC CTCGAG      356

```

(2) INFORMATION FOR SEQ ID NO:1494:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 366 base pairs
- (B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1494:

```
GAATTCGGCC TTCATGGCCT AGTAAAGGGA TTTATAATAA CATTAAAAAT TTCGTTAGAT      60
TCCAGCTGAG CACGAGTATA GCAGCATTAA CTTTAATCTC ATTGGCTACA TTAATGAACT      120
TTCCTAATCC TCTCAATGCC ATGCAGATTT TGTGGATCAA TATTATTATG GATGGACCCC      180
CAGCTCAGAG CCTTGGAGTA GAACCAGTGG ATAAAGATGT CATTGTAATA CCTCCTCGCA      240
ACTGGAAAGA CAGCATTTTG ACTAAAACT TGATACTTAA AATACTTGTT TCATCAATAA      300
TCATTGTTTG TGGGACTTTG TTTGTCTTCT GCGTGAGCT ACGAGACAAT GTGATTACAC      360
CTCGAG                                     366
```

(2) INFORMATION FOR SEQ ID NO:1495:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 258 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1495:

```
GCTCGAGCGT TGAGGTCAAC ACTTCCTCCA GGGAAAAGGA TTCCATTAAT AGATTGAAA      60
AGTATTTTAT AGTCTTTCTC TGTAGATCC AGCCTTACTG GTACAACTCT CGCAGCTGCA      120
GACTCCAAGT ACTTTACATA GGACGCAGCA ATATAGTATC TTCCATAGTT TTTTCATGACT      180
TTATTACGGC ATTTTTCAT TAATATTCG ATGATGGGCT TCTTGGCGGT GTCGCCGTGG      240
GGTCTAGACT ATCTCGAG                                     258
```

(2) INFORMATION FOR SEQ ID NO:1496:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 437 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1496:

```
GAATTCGGCT TCATGGCCTA CTCTCTTTCT CCATGTAAA CCCCTTGGCA TGAATGAAAG      60
GCTTCCCTT TATCCCTTGC TGTGTTTATT CATTGTGTCC AATGAGCTTC TGAAGGTAGG      120
AGTAACCTTG CACATTTTGC TGTGTGGGCT GCTGCATCTC TGCCAAAAGG TTTATGGGAT      180
TTTTACTCAG GAGATCCAGG AAAAGGAGGA GCCTGGAATC TAAGCACTTA TCTCCTGAAA      240
AGGTACAGAA ACATGTTGGA GATCTTGAGC CTCAAGGTGC TTGCTTCAGA ATTTTCCTGA      300
TTCTCCCTCT CCAGACCTAT TCTGTTCTTG GGACCCAAGC TTCTTGGCTC CAGCCCACTC      360
CCCCACTAGA GGAGCTGGAA AGTTTGGTGC TGTGGTCATA CCAAAGATGG GCAACACCCA      420
GACTCCTCAC CCTCGAG                                     437
```

(2) INFORMATION FOR SEQ ID NO:1497:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 516 base pairs
(B) TYPE: nucleic acid

(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1497:

GAATTCGGCC	TTCATGGCCT	AGTGCAGGTC	CTGGTGCTTG	ATGGTCGAGG	CCATCTCCTG	60
GGCCGCCTGG	CGGCCATCGT	GGCTAAACAG	GTAAGTCTGG	GCCGGAAGGT	GGTGGTCGTA	120
CGCTGTGAAG	GCATCAACAT	TTCTGGCAAT	TTCTACAGAA	ACAAGTTGAA	GTACCTGGCT	180
TTCTCTCCGA	AGCGGATGAA	CACCAACCCT	TCCCAGAGGC	CCTACCACTT	CCGGGCCCCC	240
AGCCGCATCT	TCTGGCGGAC	CGTGCAGGTC	ATGCTGCCCC	ACAAAACCAA	GCGAGGCCAG	300
GCCGCTCTGG	ACCGTCTCAA	GGTGTGAC	GGCATCCAC	CGCCCTACGA	CAAGAAAAAG	360
CGGATGGTGG	TTCTGCTGC	CCTCAAGGTC	GTGCGTCTGA	AGCCTACAAG	AAAGTTTGCC	420
TATCTGGGGC	GCCTGGCTCA	CGAGGTTGGC	TGGAAGTACC	AGGCAGTGAC	AGCCACCCTG	480
GAGGAGAAGA	GGAAAGAGAA	AGCCAAGAAC	CTCGAG			516

(2) INFORMATION FOR SEQ ID NO:1498:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 329 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1498:

GCGAGCTCCT	GACCTCAGGT	GATCTACCCG	CCTCAGCCTC	CCAAAGTGTT	AGGATTACAG	60
GCGTGAGCCA	CGCACCTGG	CACCCCCC	CTTTTTTTT	AATATAAATG	ATCAGTCTTA	120
ACTCCCTAGG	TTATCAGGT	GAGGGGGTGG	GGATGAGGCT	GGGGGACAGA	TTGTTTTCCT	180
GGCTTCTAGC	TCGGTGTCT	TTCTGCCTCT	GTGCACAACA	AGGTATGCGT	GTATTGTGGT	240
TGTGGACTGT	GGTTGTGGAC	TGCCTATTCA	CAAGTGGCTA	TGAGGCCCAT	CTGCTGATGC	300
TTTGTGATGC	ACTTGGCGAT	GAACCTGAG				329

(2) INFORMATION FOR SEQ ID NO:1499:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 430 base pairs
(B) TYPE: nucleic acid
(C) STRANDEDNESS: double
(D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1499:

GAATTCGGCC	TTCATGGCCT	AGGAGCGCGG	TGGCCACGGA	ACGCTGCCCG	GAGCCGCGCG	60
AGGGAGGACC	CGACGCGCGG	CGTTTACCCA	GCGCAGCGTT	CCACCGCTCG	GGTTTGCTG	120
GATAAAATAA	AAAATGGGGA	TATTGACCTC	CTGTCACTAC	TGCATGGACT	TTGATGGTTT	180
CCAATCATT	CTTTCTCCTC	TGTGTCAATC	TGCCTCTTCG	AGAAATTCAT	ACTCCTGAAT	240
AGCTCTCCAG	ACCCCGAGCT	GGCATGTGG	TGAGTTCAGG	GCCCAATCA	AGTAGTACCA	300
GCAATCAGGG	AATCTCTATC	TGTTTGAAT	GGATTCACAC	CAGCCACAAG	CCTGGAAAGA	360
TGGTGTCA	ATCTACAGTC	AGGCAGGATT	CTCCTGTGGA	GCCCTGGGAA	GGGATCAGCG	420
ATCACTCGAG						430

(2) INFORMATION FOR SEQ ID NO:1500:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 375 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: double
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1500:

GAATTCGGCC	TTCATGGCCT	AGCCAAGTCT	GGGAAGCCTT	AAGGAAAGGA	GTGCCCCTCG	60
GCGTCTTGGT	CCTCCTGTCC	CTGCTGCAGG	GGCTGGGGCC	TCCGGAGCTG	CTGCGGGCTC	120
CCCTCAGGCT	CTGCTTCGTG	ACCCGTGACC	CATGACCCAC	AGTGCTGGCC	TCCTGTGGGG	180
CCACTATAGC	AGCCACCAGA	AGCCCGGAGG	CCCTCAGGGA	AGCCCAAGGC	CTGCAGAAGC	240
CTCCTGGCCT	GGCTGTGTCT	TCCCCACCCA	GCTCTCCCCT	GCGCCCCTGT	CTTTGTAAAT	300
TGACCCTTCT	GGAGTGGGGG	GCGGCGGGCA	GGGCTGCTTT	TCTTAGTCTG	ATACCAAGCA	360
AGGCCTTTTC	TCGAG					375

What is claimed is:

1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of:

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NO:1321, SEQ ID NO:1322, SEQ ID NO:1323, SEQ ID NO:1324, SEQ ID
NO:1325, SEQ ID NO:1326, SEQ ID NO:1327, SEQ ID NO:1328, SEQ ID

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NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or a complement of said sequence.

2. An isolated polynucleotide consisting of a nucleotide sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID

NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241, SEQ ID NO:242, SEQ ID NO:243, SEQ ID NO:244, SEQ ID NO:245, SEQ ID NO:246, SEQ ID NO:247, SEQ ID NO:248, SEQ ID NO:249, SEQ ID NO:250, SEQ ID NO:251, SEQ ID NO:252, SEQ ID NO:253, SEQ ID NO:254, SEQ ID NO:255, SEQ ID NO:256, SEQ ID NO:257, SEQ ID

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or a complement of said sequence.

3. An isolated polynucleotide consisting essentially of a nucleotide sequence selected from the group consisting of:

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NO:1393, SEQ ID NO:1394, SEQ ID NO:1395, SEQ ID NO:1396, SEQ ID NO:1397, SEQ ID NO:1398, SEQ ID NO:1399, SEQ ID NO:1400, SEQ ID NO:1401, SEQ ID NO:1402, SEQ ID NO:1403, SEQ ID NO:1404, SEQ ID NO:1405, SEQ ID NO:1406, SEQ ID NO:1407, SEQ ID NO:1408, SEQ ID NO:1409, SEQ ID NO:1410, SEQ ID NO:1411, SEQ ID NO:1412, SEQ ID NO:1413, SEQ ID NO:1414, SEQ ID NO:1415, SEQ ID NO:1416, SEQ ID NO:1417, SEQ ID NO:1418, SEQ ID NO:1419, SEQ ID NO:1420, SEQ ID NO:1421, SEQ ID NO:1422, SEQ ID NO:1423, SEQ ID NO:1424, SEQ ID NO:1425, SEQ ID NO:1426, SEQ ID NO:1427, SEQ ID NO:1428, SEQ ID NO:1429, SEQ ID NO:1430, SEQ ID NO:1431, SEQ ID NO:1432, SEQ ID NO:1433, SEQ ID NO:1434, SEQ ID NO:1435, SEQ ID NO:1436, SEQ ID NO:1437, SEQ ID NO:1438, SEQ ID NO:1439, SEQ ID NO:1440, SEQ ID NO:1441, SEQ ID NO:1442, SEQ ID NO:1443, SEQ ID NO:1444, SEQ ID NO:1445, SEQ ID NO:1446, SEQ ID NO:1447, SEQ ID NO:1448, SEQ ID NO:1449, SEQ ID NO:1450, SEQ ID NO:1451, SEQ ID NO:1452, SEQ ID NO:1453, SEQ ID NO:1454, SEQ ID NO:1455, SEQ ID NO:1456, SEQ ID NO:1457, SEQ ID NO:1458, SEQ ID NO:1459, SEQ ID NO:1460, SEQ ID NO:1461, SEQ ID NO:1462, SEQ ID NO:1463, SEQ ID NO:1464, SEQ ID NO:1465, SEQ ID NO:1466, SEQ ID NO:1467, SEQ ID NO:1468, SEQ ID NO:1469, SEQ ID NO:1470, SEQ ID NO:1471, SEQ ID NO:1472, SEQ ID NO:1473, SEQ ID NO:1474, SEQ ID NO:1475, SEQ ID NO:1476, SEQ ID NO:1477, SEQ ID NO:1478, SEQ ID NO:1479, SEQ ID NO:1480, SEQ ID NO:1481, SEQ ID NO:1482, SEQ ID NO:1483, SEQ ID NO:1484, SEQ ID NO:1485, SEQ ID NO:1486, SEQ ID NO:1487, SEQ ID NO:1488, SEQ ID NO:1489, SEQ ID NO:1490, SEQ ID NO:1491, SEQ ID NO:1492, SEQ ID NO:1493, SEQ ID NO:1494, SEQ ID NO:1495, SEQ ID NO:1496, SEQ ID NO:1497, SEQ ID NO:1498, SEQ ID NO:1499, and SEQ ID NO:1500;

or a complement of said sequence.

4. An isolated polynucleotide comprising a nucleotide sequence which hybridizes to a sequence selected from the group consisting of:

SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ

ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36, SEQ ID NO:37, SEQ ID NO:38, SEQ ID NO:39, SEQ ID NO:40, SEQ ID NO:41, SEQ ID NO:42, SEQ ID NO:43, SEQ ID NO:44, SEQ ID NO:45, SEQ ID NO:46, SEQ ID NO:47, SEQ ID NO:48, SEQ ID NO:49, SEQ ID NO:50, SEQ ID NO:51, SEQ ID NO:52, SEQ ID NO:53, SEQ ID NO:54, SEQ ID NO:55, SEQ ID NO:56, SEQ ID NO:57, SEQ ID NO:58, SEQ ID NO:59, SEQ ID NO:60, SEQ ID NO:61, SEQ ID NO:62, SEQ ID NO:63, SEQ ID NO:64, SEQ ID NO:65, SEQ ID NO:66, SEQ ID NO:67, SEQ ID NO:68, SEQ ID NO:69, SEQ ID NO:70, SEQ ID NO:71, SEQ ID NO:72, SEQ ID NO:73, SEQ ID NO:74, SEQ ID NO:75, SEQ ID NO:76, SEQ ID NO:77, SEQ ID NO:78, SEQ ID NO:79, SEQ ID NO:80, SEQ ID NO:81, SEQ ID NO:82, SEQ ID NO:83, SEQ ID NO:84, SEQ ID NO:85, SEQ ID NO:86, SEQ ID NO:87, SEQ ID NO:88, SEQ ID NO:89, SEQ ID NO:90, SEQ ID NO:91, SEQ ID NO:92, SEQ ID NO:93, SEQ ID NO:94, SEQ ID NO:95, SEQ ID NO:96, SEQ ID NO:97, SEQ ID NO:98, SEQ ID NO:99, SEQ ID NO:100, SEQ ID NO:101, SEQ ID NO:102, SEQ ID NO:103, SEQ ID NO:104, SEQ ID NO:105, SEQ ID NO:106, SEQ ID NO:107, SEQ ID NO:108, SEQ ID NO:109, SEQ ID NO:110, SEQ ID NO:111, SEQ ID NO:112, SEQ ID NO:113, SEQ ID NO:114, SEQ ID NO:115, SEQ ID NO:116, SEQ ID NO:117, SEQ ID NO:118, SEQ ID NO:119, SEQ ID NO:120, SEQ ID NO:121, SEQ ID NO:122, SEQ ID NO:123, SEQ ID NO:124, SEQ ID NO:125, SEQ ID NO:126, SEQ ID NO:127, SEQ ID NO:128, SEQ ID NO:129, SEQ ID NO:130, SEQ ID NO:131, SEQ ID NO:132, SEQ ID NO:133, SEQ ID NO:134, SEQ ID NO:135, SEQ ID NO:136, SEQ ID NO:137, SEQ ID NO:138, SEQ ID NO:139, SEQ ID NO:140, SEQ ID NO:141, SEQ ID NO:142, SEQ ID NO:143, SEQ ID NO:144, SEQ ID NO:145, SEQ ID NO:146, SEQ ID NO:147, SEQ ID NO:148, SEQ ID NO:149, SEQ ID NO:150, SEQ ID NO:151, SEQ ID NO:152, SEQ ID NO:153, SEQ ID NO:154, SEQ ID NO:155, SEQ ID NO:156, SEQ ID NO:157, SEQ ID NO:158, SEQ ID NO:159, SEQ ID NO:160, SEQ ID NO:161, SEQ ID NO:162, SEQ ID NO:163, SEQ ID NO:164, SEQ ID NO:165, SEQ ID NO:166, SEQ ID NO:167, SEQ ID NO:168, SEQ ID NO:169, SEQ ID NO:170, SEQ ID NO:171, SEQ ID NO:172, SEQ ID NO:173, SEQ ID NO:174, SEQ ID NO:175, SEQ ID NO:176, SEQ ID

NO:177, SEQ ID NO:178, SEQ ID NO:179, SEQ ID NO:180, SEQ ID NO:181, SEQ ID NO:182, SEQ ID NO:183, SEQ ID NO:184, SEQ ID NO:185, SEQ ID NO:186, SEQ ID NO:187, SEQ ID NO:188, SEQ ID NO:189, SEQ ID NO:190, SEQ ID NO:191, SEQ ID NO:192, SEQ ID NO:193, SEQ ID NO:194, SEQ ID NO:195, SEQ ID NO:196, SEQ ID NO:197, SEQ ID NO:198, SEQ ID NO:199, SEQ ID NO:200, SEQ ID NO:201, SEQ ID NO:202, SEQ ID NO:203, SEQ ID NO:204, SEQ ID NO:205, SEQ ID NO:206, SEQ ID NO:207, SEQ ID NO:208, SEQ ID NO:209, SEQ ID NO:210, SEQ ID NO:211, SEQ ID NO:212, SEQ ID NO:213, SEQ ID NO:214, SEQ ID NO:215, SEQ ID NO:216, SEQ ID NO:217, SEQ ID NO:218, SEQ ID NO:219, SEQ ID NO:220, SEQ ID NO:221, SEQ ID NO:222, SEQ ID NO:223, SEQ ID NO:224, SEQ ID NO:225, SEQ ID NO:226, SEQ ID NO:227, SEQ ID NO:228, SEQ ID NO:229, SEQ ID NO:230, SEQ ID NO:231, SEQ ID NO:232, SEQ ID NO:233, SEQ ID NO:234, SEQ ID NO:235, SEQ ID NO:236, SEQ ID NO:237, SEQ ID NO:238, SEQ ID NO:239, SEQ ID NO:240, SEQ ID NO:241, SEQ ID NO:242, SEQ ID NO:243, SEQ ID NO:244, SEQ ID NO:245, SEQ ID NO:246, SEQ ID NO:247, SEQ ID NO:248, SEQ ID NO:249, SEQ ID NO:250, SEQ ID NO:251, SEQ ID NO:252, SEQ ID NO:253, SEQ ID NO:254, SEQ ID NO:255, SEQ ID NO:256, SEQ ID NO:257, SEQ ID NO:258, SEQ ID NO:259, SEQ ID NO:260, SEQ ID NO:261, SEQ ID NO:262, SEQ ID NO:263, SEQ ID NO:264, SEQ ID NO:265, SEQ ID NO:266, SEQ ID NO:267, SEQ ID NO:268, SEQ ID NO:269, SEQ ID NO:270, SEQ ID NO:271, SEQ ID NO:272, SEQ ID NO:273, SEQ ID NO:274, SEQ ID NO:275, SEQ ID NO:276, SEQ ID NO:277, SEQ ID NO:278, SEQ ID NO:279, SEQ ID NO:280, SEQ ID NO:281, SEQ ID NO:282, SEQ ID NO:283, SEQ ID NO:284, SEQ ID NO:285, SEQ ID NO:286, SEQ ID NO:287, SEQ ID NO:288, SEQ ID NO:289, SEQ ID NO:290, SEQ ID NO:291, SEQ ID NO:292, SEQ ID NO:293, SEQ ID NO:294, SEQ ID NO:295, SEQ ID NO:296, SEQ ID NO:297, SEQ ID NO:298, SEQ ID NO:299, SEQ ID NO:300, SEQ ID NO:301, SEQ ID NO:302, SEQ ID NO:303, SEQ ID NO:304, SEQ ID NO:305, SEQ ID NO:306, SEQ ID NO:307, SEQ ID NO:308, SEQ ID NO:309, SEQ ID NO:310, SEQ ID NO:311, SEQ ID NO:312, SEQ ID NO:313, SEQ ID NO:314, SEQ ID NO:315, SEQ ID NO:316, SEQ ID NO:317, SEQ ID NO:318, SEQ ID NO:319, SEQ ID NO:320, SEQ ID NO:321, SEQ ID NO:322, SEQ ID NO:323, SEQ ID NO:324, SEQ ID NO:325, SEQ ID NO:326, SEQ ID NO:327, SEQ ID NO:328, SEQ ID NO:329, SEQ ID

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or to complement of said sequence.

An isolated protein encoded by an isolated polynucleotide of claim 1.

6. An isolated protein encoded by an isolated polynucleotide of claim 2.

7. An isolated protein encoded by an isolated polynucleotide of claim 3.

8. An isolated protein encoded by an isolated polynucleotide of claim 4.

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